# MX7 User's Guide (Microsoft® Windows® CE 5.0 Equipped)





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#### **Revision Notice**

Introduction	Environmental Specifications: Added IEC 60529 compliant to IP65.
Quick Start	Removed references to recalibrate touch screen after every cold boot.
MX7 Hand Held Computer	Added <i>Taskbar Icons</i> . Removed <i>Mappable Diamond Keys</i> . Removed references to recalibrate touch screen after every cold boot (effective August 2008).
Appendix A – KeyMaps	Added footnote about correct keypress sequence for F21-F24 on the 55-key keypad.
Appendix B – Regulatory Notices and Safety Information	Updated approvals for 802.11a/b/g radio. Removed Summit Declaration of Compliance for consistency.

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# Introduction

#### **Overview**

The LXE® MX7 is a rugged, portable, hand-held Microsoft® Windows® CE 5.0 equipped mobile computer capable of wireless data communications. The mobile device can transmit information using an 802.11 network card and it can store information for later transmission through an RS-232 or USB port.

The mobile device is vertically oriented and features backlighting for the display. The touch-screen display supports graphic features and Windows icons that the Windows CE 5.0 operating system supports. Keypads are available in 55-key alphanumeric and 32-key numeric-alpha versions. Also available is a 5250 55-key keypad overlay.

This device is a Windows CE 5.0 compatible computer that can be scaled from a limited function batch computer to an integrated RF scanning computer. A trigger handle is available as an accessory. The MX7 Cold Storage (MX7CS)



available as an accessory. The MX7 Cold Storage (MX7CS) mobile device functions normally in various temperature ranges.

The attached stylus is used to assist in entering data and configuring the mobile device. Protective film for the touchscreen is available as an accessory.

The MX7 is powered by a 2200 mAh Lithium-Ion main battery pack and an internal NiCd backup battery. The MX7 Bluetooth® module supports LXE Bluetooth printers and scanners.

#### **Important**

If the mobile device has AppLock installed, please refer to the *MX7 Reference Guide*, Chapter 6 – AppLock for setup and processing.

Wireless configuration and security parameters are described in detail in the MX7 Reference Guide, Chapter 5 – Wireless Network Configuration.

#### **Related Manuals**

**Integrated Scanner Programming Guide** – contains programming barcodes used when setting up integrated scan engines.

- SE824, SE955 and SE1524 scanner barcode reading parameters, refer to Chapter 2 in the *Integrated Scanner Programming Guide*. The SE955 scanner replaced the SE824 scanner on all MX7's manufactured after July 2006.
- **Intermec EV15 linear imager**, refer to Chapter 3 in the *Integrated Scanner Programming Guide*.
- 5380SF 2D imager, refer to Chapter 4 in the *Integrated Scanner Programming Guide*.

**MX7 Multicharger User's Guide** – contains user, technical and troubleshooting information for the MX7 battery multi-charger.

**MX7 Cradle Reference Guide** – contains user, technical and troubleshooting information for the MX7 Desktop and Passive Vehicle Mounted cradles.

2 Overview

# **MX7 Features**

New features affect user interaction and internal operation of the MX7.

The appropriate wireless utility for your device configuration has been pre-installed by LXE.

The desktop will display an *Odyssey Client Utility* icon or it will display a *Summit Client Utility* icon for 802.11 configuration and security.

	Odyssey	Summit	Optional?
Summit® Client Utility	-	x	No
Odyssey® Client Utility	x	-	No
LXE Bluetooth Printers and Scanners	-	X	Yes
400MHz	x	X	No
128MB RAM	x	X	No
128MB Flash	x	X	No
SE955 Laser Scanner	-	X	Yes
EV-15 Linear Imager	x	X	Yes
SE824 Laser Scanner	x	-	Yes
5380SF 2D Imager	-	X	Yes
CE 5.0	x	X	No
Voice	-	X	Yes
RFTerm®	Х	X	Yes
JAVA®	X	x	Yes
AppLock	Х	X	Yes
MX7 Cold Storage (MX7CS) mobile device	X	X	No

Note: The LXE Login Utility should be used by Odyssey Clients only.

The MX7 does not have a Bluetooth managed LED.

Overview 3

## **Important Battery Information**

*Note:* 

This mobile device's backup battery maintains it's charge by drawing power from the main battery pack. Always store unused devices with a fully charged main battery pack installed. LXE recommends an in-use mobile device be frequently connected to an external power source to maintain optimum power levels in the main battery pack and the backup battery. When the backup battery and main battery pack are dead, the mobile device reverts to the last saved setup defaults when a fully charged main battery pack is installed and the device is powered On again.

# Tap 🧨 | Settings | Control Panel | Battery tab.

- Until the main battery and backup battery are completely depleted, the MX7 is always drawing power from the batteries (On).
- New batteries must be fully charged prior to use.
- Whenever possible, use the AC power adapter with the MX7 to conserve the main battery and recharge the backup battery.
- When a new battery is installed in the MX7 for the first time (or when the backup battery is completely depleted), the Time and Date reverts to it's default values.
- Backup battery replacement is performed by LXE.

Tap 🏞 | Settings | Control Panel | Date/Time tab.



RISK OF EXPLOSION IF BATTERY IS REPLACED BY AN INCORRECT TYPE.

DISPOSE OF USED BATTERIES ACCORDING TO THE INSTRUCTIONS.

ATTENTION

II y a danger d'explosion s'il y a remplacement incorrect de la batterie.



Remplacer uniquement avec une batterie du même type ou d'un type equivalent recommandé par le constructeur. Mettre au rebut les batteries usagées conformément aux instructions du fabricant.

See Also: Section titled MX7 Cold Storage later in this guide.

4 Overview

# **Document Conventions**

ALL CAPS	All caps are used to represent disk directories, file names, and application names.
Menu   Choice	Rather than use the phrase "choose the Save command from the File menu", this guide uses the convention "choose File   Save".
"Quotes" or Italics	Indicates the title of a book, chapter or a section within a chapter (for example, "Document Conventions" and <i>Document Conventions</i> ).
< >	Indicates a key on the keypad (for example, <enter>).</enter>
	Indicates a reference to other documentation.
ATTENTION	Keyword that indicates vital or pivotal information to follow.
<u> </u>	Attention symbol that indicates vital or pivotal information to follow. Also, when marked on product, means to refer to the user's guide.
	International fuse replacement symbol. When marked on the product, the label includes fuse ratings in volts (v) and amperes (a) for the product.
Note:	Keyword that indicates immediately relevant information.
CAUTION	Keyword that indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.
WARNING !	Keyword that indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.
DANGER !	Keyword that indicates a imminent hazardous situation which, if not avoided, will result in death or serious injury.

# **Environmental Specifications**

Operating Temperature	14°F to 122°F (-10°C to 50°C) [non-condensing]	
Storage Temperature	-4°F to 158°F (-20°C to 70°C) [non-condensing]	
Water and Dust	IEC 60529 compliant to IP65	
Operating Humidity	5% to 90% non-condensing at 104°F (40°C)	
Vibration	Based on MIL Std 810D	
ESD	8 kV air, 4kV contact	
Bluetooth Range	32.8 feet (10 meters) Direct line of sight only.	

#### **Laser Warnings and Labels**

- Do not look into the laser's lens.
- Do not stare directly into the laser beam.
- Do not remove the laser caution labels from the MX7.
- Do not connect the laser barcode aperture to any other device. The laser barcode aperture is certified for use with the MX7 only.

Caution:

Laser radiation when open. Please read the caution labels.

Use of controls, adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

#### Summit Client Laser Label





Odyssey Client Laser Label



Figure 1 CDRH / IEC 825 Caution Label Location – MX7, Back

Figure 2 Caution Label - Class 2 Laser Scanner

## **Continuous Scan Mode**

If Continuous Scan Mode has been enabled (default is disabled), the laser is always on and decoding. Refer to the *MX7 Reference Guide, Chapter 4 Scanner*. Caution: Laser beam is emitted continuously. Do not stare into the laser beam.

# **Components**

# **Front Views**

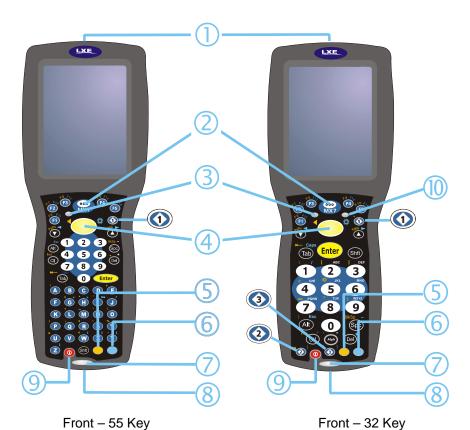


Figure 3 Front Components

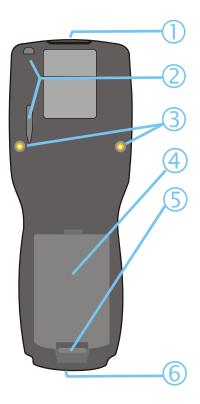
- Imager/Scanner Aperture
- 2 Speaker

1

- 3 System Status LED
- 4 Scan Button
- 5 Orange Key (Sticky Key)
- 6 Blue Key (Sticky Key)
- 7 Scan Status LED
- 8 Cable Port
- 9 On / Off Button
- 10 "Alpha" Lock LED

1 Diamond Number Keys

# **Back View**



**Figure 4 Back Components** 

- 1 Imager/Scanner Aperture
- 2 Stylus and stylus holder
  - Trigger Handle Attach Points
- 3 and Handstrap Retainer Bracket Attach Points
- 4 Main Battery
- 5 Battery Fastener
- 6 Cable Ports

# **Scanner / Imager Aperture**

CAUTION: Never stare directly into the beam aperture. Read the previous section <u>Laser</u> Warnings and Labels before using the scanner/imager.



Figure 5 Beam Aperture

**Identify** the type of integrated imager or laser scanner installed in the MX7 by looking at the type of plastic lens covering the Beam aperture.

- The laser barcode scanner has a red lens protecting the laser engine.
- The No-Scanner option has an opaque lens protecting the MX7 internal components.
- The EV-15 integrated imager has a clear lens protecting the imager engine.
- The 5380SF 2D imager has an opaque lens protecting the imager engine.

# **AC Adapter**

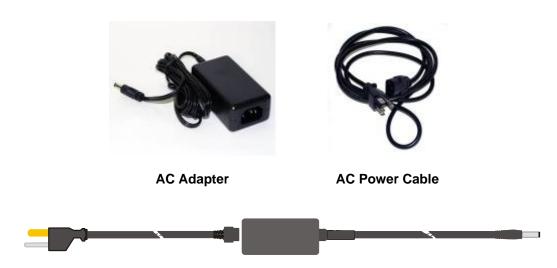


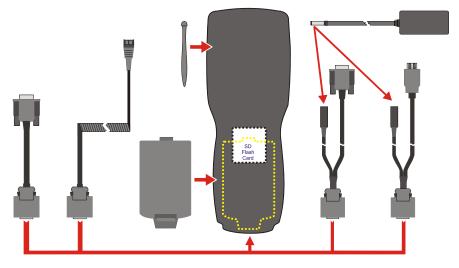
Figure 6 AC Adapter

The LXE-approved AC Power Adapter is only intended for use in a 25°C (77°F) maximum ambient temperature environment.

## **Cables**

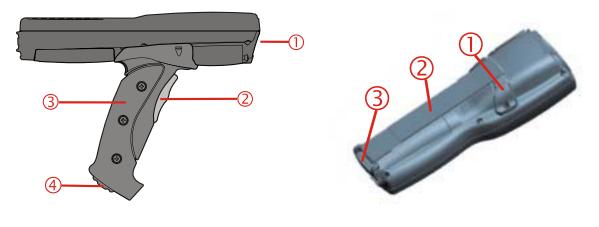


Figure 7 Cables and Adapters



Note: Tethered scanners connected to the MX7 I/O port are not supported by LXE. Tethered scanners connected to the MX7 Cradle I/O ports are supported by LXE.

# **Handle and Handstrap**



Handle Handstrap

Figure 8 Handle and Handstrap

1	Imager/Scanner Aperture	1	Handstrap Retainer Bracket
2	Trigger	2	Handstrap

- 3 Handle 3 Handstrap Clip
- 4 Tether Attach Point

Note: Either the trigger handle is attached to the MX7 or the handstrap is attached, not both. LXE recommends that, in the absence of a trigger handle, the handstrap be used at all times.

LXE pre-installs the handstrap when the MX7 is purchased without a trigger handle.

# **Quick Start**

#### In Brief . . .

Note: When your mobile device is pre-configured, the client, keypad and scan aperture configurations are assembled by LXE to your specifications. The desktop will display an Odyssey Client Utility icon or it will display a Summit Client Utility icon.

This section's instructions are based on the assumption that your new device is pre-configured and requires only accessory installation (e.g. stylus) and a power source. LXE recommends that installation or removal of accessories be performed on a clean, well-lit surface. When necessary, protect the work surface, the mobile device, and components from electrostatic discharge.

This guide takes you through an introduction to and operation of the MX7.

- 1. Insert a fully charged main battery pack. (Always put a fully charged battery in the mobile device at the beginning of the shift or workday.)
- 2. Connect an external power source to the unit (if required).
- 3. If the screen does not automatically display, tap the Power key.
- 4. Calibrate the touchscreen (OS versions released before August 2008 only).
- 5. A white screen will appear during the boot process until all CAB files and applications are loaded and installed. Radio setup screens may appear and disappear while files are loading. After all files are loaded and the Desktop is displayed, adjust audio volume and other parameters if desired.

If needed, change the Time and Date from it's default value by tapping the \* | Settings | Control Panel | Date/Time icon.







**MX7** with Summit Client

Figure 9 MX7 Desktop

Based on your installed software version and hardware options, your system may not be exactly the same as the system described in this guide. Contact your LXE representative for information on the latest upgrades for your MX7.

In Brief . . .

# **Troubleshooting**

Can't calibrate the touch screen, change the date/time or adjust the volume.	AppLock is installed and running on the mobile device. AppLock restricts User access to running programs. Changes or modifications require Administrator access.  Refer to AppLock in the <i>MX7 Reference Guide</i> for setup and processing information.		
RFterm opens and runs upon each cold reset and warm reset.	Tap File   Exit to close the RFTerm application.		
The Login utility waits for a login name before the MX7 can continue.  Refer to the MX7 Reference Guide for complete information.	R Enter Login name:  OK Cancel  LLNMGUTIL01A-SIT1	If the LXE Login Utility has been installed, a login screen is presented to the user after a return from Suspend, a warm reset and a cold reset. Type the login name and tap OK to continue. Tap Cancel to use the previously entered user name.  Note: This option should only be used by Odyssey Clients.	
The MX7 seems to lockup as soon as it is warm booted.	There may be small delays while the wireless client connects to the network, authorization for Voxware-enabled applications complete, Wavelink Avalanche management of the MX7 startup completes, and Bluetooth relationships establish or re-establish		

# **Inserting Fully Charged Battery**

CAUTION	RISK OF EXPLOSION IF BATTERY IS REPLACED BY AN INCORRECT TYPE.  DISPOSE OF USED BATTERIES ACCORDING TO THE INSTRUCTIONS.
ATTENTION	Il y a danger d'explosion s'il y a remplacement incorrect de la batterie.  Remplacer uniquement avec une batterie du même type ou d'un type equivalent recommandé par le constructeur. Mettre au rebut les batteries usagées conformément aux instructions du fabricant.

Note: The unit will not function unless the main battery pack is in place and securely latched. Be sure to place the mobile device in Suspend before removing the battery. Failing to properly place the device in Suspend mode will result in a loss of all unsaved data.



Figure 10 Main Battery Pack

The main battery is located in a compartment on the back of the unit. To insert or replace the battery, complete the following steps:

- 1. Place the MX7 in Suspend mode.
- 2. Detach the bottom hook of the handstrap (if installed).
- 3. Press the battery locking tab up to release the main battery pack. The battery case serves as the back cover for the battery well for the MX7.
- 4. Pull the battery up and out of the battery well with a hinge motion. Place the discharged battery pack in a powered battery charger/analyzer.
- 5. Tilt the end (without the latch) of the fully charged battery pack into the upper end of the battery compartment, and firmly press the other end (with the latch) until it is fully inserted into the battery compartment.
- 6. Push down on the battery pack until it clicks into place.
- 7. Replace the handstrap clip in its holder.

Note: The battery should not be replaced in a dirty, harsh or hazardous environment. When the battery is out of the MX7, any dust or moisture that enters the battery compartment can get into the main unit, potentially causing damage.

## **Tapping the Power Key**

Note: Refer to the section titled **Power Modes** in the **MX7 Reference Guide** for information relating to the power states of the MX7.

Important: Until the main battery and backup battery are completely depleted, the MX7 is always drawing power from the batteries (On).

When a battery is inserted in the MX7 for the first time press the Power key.

Tapping the Power key places the MX7 immediately in Suspend mode.

Tapping the Power key again immediately returns the MX7 from Suspend.

or

Tap 🥙 | Suspend.

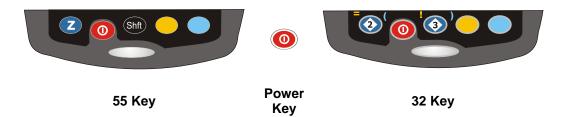


Figure 11 Power Key Location

See section LED Indicators and System Status LED later in this guide.

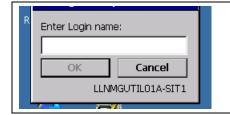
# **Checking Battery Status**

Tap the Settings | Control Panel | Battery icon. Main battery level, backup battery level, status and other details are displayed.

# **Entering the Login Name**

*Note:* This option should only be used by Odyssey Clients.

If the LXE Login Utility has been installed, the following screen is presented to the user after a return from Suspend, a warm reset and a cold reset.



There are three options:

Type the login name and tap OK to continue.

Tap Cancel to use the previously entered user name.

Enter a new login name and tap OK to continue.

#### **Tapping the Touchscreen with a Stylus**

Note: Always use the point of the stylus for tapping or making strokes on the touchscreen.

Never use an actual pen, pencil, or sharp/abrasive object to write on the touchscreen. If
the tip of the stylus is dirty, clean the tip with a water moistened cloth before touching the
screen with the stylus.

Hold the stylus as if it were a pen or pencil. Touch an element on the screen with the tip of the stylus then remove the stylus from the screen. Firmly press the stylus into the stylus holder when the stylus is not in use.

Like using a mouse to left-click icons on a desktop computer screen, using the stylus to tap icons on the touchscreen is the basic action that can:

- Open applications
- Choose menu commands
- Select options in dialog boxes or drop-down boxes
- Drag the slider in a scroll bar
- Select text by dragging the stylus across the text
- Place the cursor in a text box prior to typing in data or retrieving data using the Scan button or an input/output device connected to the serial port.

A stylus replacement kit containing 10 stylus' can be ordered from LXE. See the section titled *Accessories* for the stylus replacement kit part number.

Note: A "right mouse click" function must be programmed by the customer to accept a constant stream of left mouse click messages. An application can choose to interpret this stream of messages as a right mouse click. LXE does not support non-LXE application programming.

#### **Keypad Shortcuts**

Use keyboard shortcuts instead of the stylus:

- Press <Tab> and an <Arrow> key to select a file.
- Press <Shift> and an <Arrow> key to select several files.
- Once you've selected a file, press <Alt> then press <Enter> to open its Properties dialog.
- Press <Del> to delete a file.
- To force the Start menu to display, press <Ctl> and release, press <Blue> and release, then press <Esc> (the Alt key).

## **Calibrating the Touchscreen**

If the touchscreen is not responding properly to stylus taps, you may need to recalibrate the touchscreen. Recalibration involves tapping the center of a target. If you miss the center, keep the stylus on the screen, slide it over the target's center, and then lift the stylus.

If the touchscreen is not accepting taps or needs recalibration, press <Ctrl>+<Esc> to force the Start Menu to appear.

To recalibrate the screen, select 🎤 | Settings | Control Panel | Stylus | Calibration tab.

To begin, tap the Recalibrate button on the screen with the stylus.



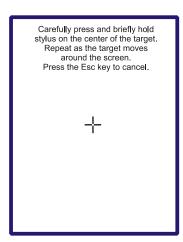


Figure 12 Touchscreen Recalibration

Follow the instructions on the screen and press the Enter key to save the new calibration settings or press Esc to cancel or quit.

# **Entering the AppLock Activation Key**

# **Hotkey (Activation Hotkey)**

If the mobile device uses LXE's Multi AppLock to allow the user to switch between applications, the default Activation key is **Ctrl+Spc**. The key sequence switches the focus between one application and another. Data entry affects the application running in the foreground only. *Note that the system administrator may have assigned a different key sequence to use when switching applications*.

#### **Touch**

*Note:* The touch panel must be enabled.

Tap the Switchpad taskbar icon to place the popup menu on screen. Tap one of the application names in the popup menu. The selected application is brought to the foreground while the other application continues to run in the background. Stylus taps affect the application running in the foreground only.

## **Optional Accessory Installation**

## **Attaching Handstrap (Optional)**

Note: Either the trigger handle is attached to the MX7 or the handstrap is attached, not both. LXE recommends that, in the absence of a trigger handle, the handstrap be used at all times. LXE pre-installs the handstrap on devices that are purchased without a trigger handle. Refer to the MX7 Reference Guide for trigger handle instruction.

Once installed, the handstrap provides a means for the user to secure the computer to their hand. It is adjustable to fit practically any size hand and does not interfere with the multipurpose cable, if connected, when the mobile device is in a cradle.



Figure 13 Attaching the Handstrap

- 1 Handstrap Retainer Bracket
- 2 Handstrap
- 3 Handstrap Clip

Tool Required: #1 Phillips Screwdriver (not supplied by LXE)

#### Installation

- 1. Place the MX7, with the screen facing down, on a flat stable surface.
- 2. Attach the handstrap retainer bracket to the MX7 with the screws provided.
- 3. Slip the Handstrap Clip into the bracket at the base of the MX7.
- 4. Making sure the closed loop fastener surfaces on the handstrap are facing up, slide the strap through the pin in the retainer bracket and the clip.
- 5. Fold each end of the the strap over so that the closed loop fastener surfaces mate evenly.
- 6. Test the strap's connection making sure the MX7 is securely connected to each end of the strap connectors.

Check the closed loop fastener, retainer bracket and clip connections frequently. If they have loosened, they must be tightened before the MX7 is placed into service again.

## **Connecting an External Power Supply (Optional)**

The MX7 receives AC/DC power from the AC/DC 12V Power Supply. The MX7 external power connection is part of the RS-232 cable assembly and the USB cable assembly.

#### Putting it all together ....

To apply external power to the MX7 follow the steps below in sequence.

- 1. Plug the 3 prong adapter cable end of the external power module into an AC power source (e.g. wall outlet).
- 2. Squeeze the sides of the power connector and push the MX7 power cable connector into the MX7 I/O port until it clicks. The click means the connector is seated firmly.
- 3. Press the power cable connector pin from the power adapter into the connector on the (USB/Power or RS-232/Power) cable attached to the base of the MX7. AC power is now being supplied to the MX7.

The System LED above the Scan key illuminates when the MX7 is charging the main battery pack using external power through the power cable. The backup battery is always being trickle charged by the main battery pack..

Whenever possible, use the AC power adapter with the MX7 to conserve the main battery power and maintain a charge in the backup battery.

#### **Assembling the AC Power Adapter**

The LXE-approved AC Power Adapter is only intended for use in a 25°C (77°F) maximum ambient temperature environment.

If the AC power cable is not included with the AC Adapter, please contact your LXE representative for assistance.



Figure 14 AC/DC 12V External Power Supply

Plug the 3-prong cable into an AC wall outlet. Firmly press the female end of the power cable into the male connector on the power adapter. AC power is now being supplied to the power adapter. See *Accessories* for the LXE part number for the AC Power Adapter to use with the MX7.

#### **Connecting the Multipurpose USB / Power Cable**



#### Figure 15 Connect the USB / Power Cable to the MX7 Port

Connector A Squeeze the clips on the connector cable to open the catches in the connector assembly. Firmly press Connector A into the connector at the base of the MX7. Release the clips in the connector cable. Test the connection for stability before connecting the B or C connector.

Connector B Plug the 3-prong cable into an AC wall outlet. Firmly push the power cable connector pin into connector B until you hear a slight click.

Connector C Insert the USB Type A plug into an appropriate USB port on a desktop/laptop computer for ActiveSync communication.

#### Connecting the Multipurpose RS-232 / Power Cable



#### Figure 16 Connect the RS-232 / Power Cable to the MX7 Port

Connector A Squeeze the clips on the connector cable to open the catches in the connector assembly. Firmly press Connector A into the connector at the base of the MX7. Release the clips in the connector cable. Test the connection for stability before connecting the B or C connector.

Connector B Plug the 3-prong cable into an AC wall outlet. Firmly push the power cable connector pin into connector B until you hear a slight click.

Connector C Align the RS-232 serial cable end carefully to an appropriate serial port on a desktop/laptop computer for ActiveSync communication. Press the ends together and hand tighten the screws on either side of the serial cable until the MX7 is securely connected to the serial device.

#### **Connecting to a Printer Interface Cable**



Figure 17 Connect to a Printer Interface Cable

Connector A Squeeze the clips on the connector cable to open the catches in the connector

assembly. Firmly press Connector A into the connector at the base of the MX7. Release the clips in the connector cable. Test the connection for stability before

connecting the B or C connector.

Connector B Align the RS-232 serial cable end carefully to the serial port on the cable from the printer. Press the ends together and hand tighten the screws on either side of

the serial cable until it is securely connected to the printer cable.

# **Connecting the Audio Cable and a Headset**

See section titled Set the Audio Speaker Volume.

*Note:* The audio option draws power from the main battery.

The headset consists of an earpiece, a microphone and an attached cable. The headset attaches to the audio cable which attaches to the MX7.





Figure 18 Audio Cable and Headset

Connector A Squeeze the clips on the connector cable to open the catches in the connector assembly. Firmly press Connector A into the connector at the base of the MX7. Release the clips in the connector cable. Test the connection for stability before connecting the B connector.

Connector B Align Connector B and the headset quick connect cable end. Firmly push the cable ends together until they click and lock in place.

#### **Adjust Microphone and Secure the Cable**

Do not twist the microphone boom when adjusting the microphone.

The microphone should be adjusted to be about two finger widths from your mouth.

Make sure the microphone is pointed at your mouth. Note the small "Talk" label near the mouthpiece. Make sure the Talk label is in front of your mouth.

The microphone cable can be routed over or under clothing.

#### **Under Clothing**

- Leave the cable exposed only at the top of the collar.
- Be sure to leave a small loop of cable to allow movement of your head.

#### **Over Clothing**

- Use clothing clips to hold the cable close to your body.
- Tuck the cable under the belt, but leave a small loop where it goes under the belt.
- Do not wear the cable on the front of your body. It may get in your way or get caught on protruding objects.

#### **Entering Data**

Data is entered into the MX7 by speaking into the headset's microphone when prompted.

Please contact your System Administrator if assistance is needed with the voice software installed on your MX7.

# Using the 55 Key ANSI / CE Keypad

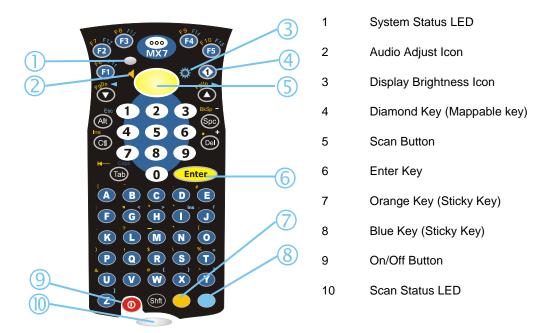
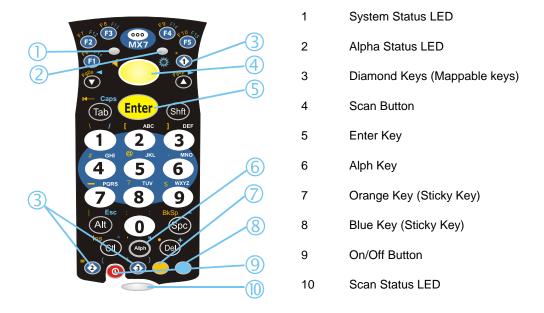


Figure 19 The ANSI / Batch Keypad

- When using a sequence of keys that includes a sticky key, press the sticky key first, release it, then press the rest of the key sequence.
- When using a sequence of keys that includes the Orange or Blue keys, press the color key first then the rest of the key sequence.
- Alphabetic keys default to lower case letters. Press the Shft key, then the alphabetic key for an uppercase letter.
- When the computer boots, the default condition of Caps (or CapsLock) is Off. The Caps (or CapsLock) condition can be toggled with Blue plus Tab key sequence.

# **Using the 32-Key Numeric-Alpha Keypad**



# Figure 20 The 32-Key Keypad

- When using a sequence of keys that require an alpha key, first press the Alph key. Use the Shft sticky key or the Caps key sequence (Blue+Tab) for upper case alphabetic characters.
- Pressing the Alph key forces "Alpha" mode for the 2,3,4,5,6,7,8, and 9 keys. The 1 and 0 keys continue to place a 1 and 0 into the text field.
- To create a combination of numbers and letters before pressing Enter, remember to tap the Alph key to toggle between Alpha and Numeric mode.
- When using a sequence of keys that do not include the Alph key but does include a sticky key, press the sticky key first then the rest of the key sequence.

#### **Entering Data**

You can enter data into the MX7 through several different methods. The scan aperture provides barcode data entry, the I/O port is used to input/output data, and the keypad provides manual entry.

Mobile devices with a touchscreen use a stylus to input data, the I/O port and/or the keypad. An input panel (virtual keyboard) is available in applications that expect keyed input.

### **Using the Keypad**

The keypad is used to manually input data that is not collected otherwise. Almost any function that a full sized computer keyboard can provide is duplicated on the MX7 keypads but it may take a few more keystrokes to accomplish a keyed task. Please refer to *Appendix A – Key Maps* for instruction on the specific keypresses to access all keypad functions.

Almost every key has two or three different functions. The primary alpha or numeric character is printed on the key.

The Orange or Blue keys are pressed when you want to use a "sticky" key function. For example, when you press a Blue or Orange key (the sticky key), then press the key that has the desired second-function key, the second-function key is the "active" key. The specific sticky character is printed above the corresponding key in either Orange or Blue.

# **Using the Input Panel or Virtual Keyboard**

The virtual keyboard is always available when needed e.g. text field input. Tap the keyboard icon at the bottom of the screen to put the virtual keyboard on the display. Using the stylus:

- Tap the Shift key to type one capital letter.
- Tap the CAPS key to type all capital letters.
- Tap the au key to access symbols.

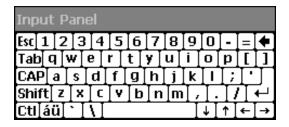


Figure 21 Input Panel / Virtual Keyboard

Some applications do not automatically display the Input Panel. In this case, do the following to use the Input Panel:

- 1. Tap the Input Panel/Virtual Keyboard icon in the taskbar.
- 2. Select **Keyboard** from the menu.
- 3. Tap the data entry area on the display when you want to enter data using the Input Panel.

## **Using the Stylus**

Note: This section is directed to the MX7 daily user. The assumption is that the mobile device has been configured and the touch panel calibrated by the System Administrator prior to releasing the MX7 for daily use.

The stylus performs the same function as the mouse that is used to point to and click elements on a desktop computer. The stylus is used in the same manner as a mouse – single tap or double tap to select menu options, drag the stylus across text to select, hold the stylus down to activate slider bars, etcetera.

Hold the stylus as if it were a pen or pencil. Touch an element on the screen with the tip of the stylus then remove the stylus from the screen. The touch screen responds to an actuation force (touch) of 4 oz. (or greater) of pressure.

The stylus can be used in conjunction with the keyboard and Scan button and an input/output device connected to the serial port.

- Touch the stylus to the field of the data entry form to receive the next data feed.
- The cursor begins to flash in the field.
- The unit is ready to accept data from either the physical keypad, virtual keyboard, or the integrated scanner / imager.

Note: Always use the point of the stylus for tapping or making strokes on the display. Never use an actual pen, pencil or sharp object to write on the touch screen.

## **Using the Integrated Barcode Scanner or Imager**

Use the integrated laser scanner to scan linear barcodes.

Use the 5380SF integrated imager to scan 2D barcodes.

#### **Barcode Scanner**

# Read all cautions, warnings and labels **before** using the laser scanner.

Do not look into the laser's lens. Do not stare directly into the laser beam.

To scan with the integrated laser barcode reader, point the scan aperture towards a barcode and press the Scan button. You will see a red beam strike the barcode. Align the beam so that the barcode is centered within the beam. The laser beam must cross the entire barcode. Move the MX7 towards or away from the barcode so that the barcode takes up approximately two-thirds the width of the beam.

There may be a tactile response combined with the Scan functions.

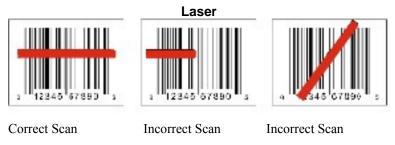


Figure 22 Laser Scanner Beam on Linear Barcode

#### 2D Imager



Figure 23 Imager Bracketed Crosshair Target on 2D Barcode

To scan with the integrated imager, point the scan aperture towards a 2D barcode and press the Scan button. You will see a bracketed crosshair strike the barcode. Align the brackets so that the center of the barcode is covered by the crosshair.

Move the MX7 towards or away from the barcode until a response is received by the MX7 (beep, tactile response, etc) or the bracketed crosshair times out and disappears.

#### **Scan Status LED**



Figure 24 Scan Status LED

The Scan Status LED (oval shaped LED below keypad) turns red when the laser beam is on. Following a barcode scan and read the Scan Status LED turns green for two seconds and the MX7 beeps or vibrates, indicating a successful scan. If the scan was unsuccessful, the Scan Status LED turns off and a different beep sequence (or vibration) is heard.

The laser engine and Scan Status LED automatically turn off after a successful or unsuccessful read. The scanner / imager is ready to scan again after the Scan key (or trigger on the handle if installed) is released, or after the Scan Status LED turns off following a successful scan.

The Scan Status LED turns amber when scanner/imager programming changes, if any, are being saved. When the LED is off, the MX7 is ready to scan again.

#### **Tethered Scanners**

Tethered scanners cabled to the MX7 I/O port are not supported by LXE.

Tethered scanners cabled to the MX7 Desktop Cradle I/O port are supported by LXE, see the MX7 Cradle Reference Guide for instruction.

#### **Bluetooth Scanners and Printers**

Bluetooth scanners are paired to the MX7 wirelessly using the MX7 Bluetooth wireless client.

See section Bluetooth Devices for more information.

Only LXE Bluetooth scanners and LXE Bluetooth printers are supported by LXE. See *Accessories*.

#### **Voice Data**

Data is entered into the MX7 by speaking into the headset's microphone when prompted. Please contact your System Administrator if assistance is needed with the voice software.

# Input Panel - Virtual Keyboard

The virtual keyboard is always available when needed e.g. text field input. Tap the keyboard icon at the bottom of the screen to put the virtual keyboard on the display. Using the stylus:

- Tap the Shift key to type one capital letter.
- Tap the CAPS key to type all capital letters.
- Tap the au key to access symbols.

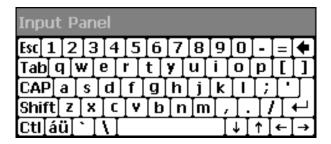


Figure 25 Input Panel / Virtual Keyboard

Some applications do not automatically display the Input Panel. In this case, do the following to use the Input Panel:

- 1. Tap the Input Panel/Virtual Keyboard icon in the taskbar.
- 2. Select **Keyboard** from the menu.
- 3. Tap the data entry area on the display when you want to enter data using the Input Panel.

Bluetooth Devices 29

#### **Bluetooth Devices**

**Assumption:** The System Administrator has Discovered and Paired targeted Bluetooth devices for each MX7. The System Administrator has also enabled / disabled Bluetooth settings and assigned a Computer Friendly Name for each MX7. See the MX7 Reference Guide for information and instruction on the MX7, Bluetooth control panel applet and supported LXE Bluetooth printers and scanners.

The Bluetooth taskbar Icon state and Bluetooth scanner LED states change as Bluetooth devices are discovered, pair, connect and disconnect. There may be audible or visual signals as paired devices re-connect with the MX7. Only LXE Bluetooth printers or scanners are recognized and displayed on the Bluetooth Devices panel. All other Bluetooth devices are ignored (see MX7 Reference Guide for details).

#### Taskbar Icon Legend



Bluetooth module is connected to one or more of the targeted Bluetooth device(s).

MX7 is not connected to any Bluetooth device.



MX7 is ready to connect with any Bluetooth device.

MX7 is out of range of all paired Bluetooth device(s). Connection is inactive.

Note: When an active paired device, not the MX7, enters Suspend Mode, is turned Off or leaves the MX7 Bluetooth scan range, the Bluetooth connection between the linked device and the MX7 is lost. There may be audible or visual signals as paired devices disconnect from the MX7. The Bluetooth remote device should be as close as possible, in direct line of sight, with the MX7 during the pairing process.

#### **Notes**

- The MX7 does not have a Bluetooth managed LED.
- The LED on the remote Bluetooth scanner illuminates during a scanning operation; the Scan LED on the MX7 does not illuminate.
- Barcode data captured by the Bluetooth scanner is manipulated by the settings in the MX7 Scanner Properties control panel applet.
- Multiple beeps may be heard during a barcode scan using the Bluetooth scanner; beeps from the Bluetooth scanner as the barcode data is accepted/rejected, and other beeps from the MX7 during final barcode data manipulation.

See Accessories for supported Bluetooth printers and scanners.

AppLock, if installed, does not stop the end-user from using the Bluetooth application, nor does it stop authorized Bluetooth-enabled devices from pairing with the MX7 while AppLock is in control. See the MX7 Reference Guide for more Bluetooth information and instruction.

# **Mobile Bluetooth Accessories**

Using the Bluetooth Barcode reader, scan the (Lnk) pairing barcode located on the MX7 to pair the mobile barcode reader with the MX7. See Bluetooth Devices in the Quick Start section for details. Refer to the MX7 Reference Guide, Chapter 1 – Introduction, Bluetooth section for instruction when Discovering nearby Bluetooth scanners and printers.

30 Getting Help

# **Getting Help**

All LXE user guides are now available on one CD and they can also be viewed/downloaded from the LXE ServicePass website. Contact your LXE representative to obtain the LXE Manuals CD.

You can also get help from LXE by calling the telephone numbers listed on the LXE Manuals CD, in the file titled *Contacting LXE*. This information is also available on the LXE website.

Explanations of terms and acronyms used in this guide are located in the file titled *LXE Technical Glossary* on the LXE Manuals CD and the LXE ServicePass website.

#### **Manuals**

- MX7 User's Guide English
- MX7 User's Guide German
- MX7 Reference Guide
- MX7 Cradle Reference Guide
- MX7 Multi-Charger / Analyzer User's Guide
- RFTerm Reference Guide
- LXE Security Primer
- CE API Programmers Guide
- Integrated Scanner Programmers Guide

#### **Accessories**

*Note:* 

Items with a Green letter R in the second column are ROHS-compliant. Please contact your LXE representative when ordering ROHS-compliant items as the part number may have changed. Items without the letter R may have received ROHS-compliance after this guide was published.

#### **MX7 Mobile Device**

MX7 Main Battery, Lithium Ion		MX7A380BATT
MX7 Main Battery, Lithium Ion (for Cold Storage MX7CS)		MX7A381BATT
5 Unit Main Battery Charger (US power cord), Includes		MV7A205CHCD5HC
analyzing capabilities	R	MX7A385CHGR5US
5 Unit Main Battery Charger (no power cord), Includes	R	MX7A386CHGR5WW
analyzing capabilities	K	WA/A380CHGK3WW
Replacement MX7 Hand Strap	R	MX7A401HANDSTRAP
Carry case for MX7 with no handle, includes shoulder strap	R	MX7A4132CASENHDL
Carry case for MX7 with handle, includes shoulder strap	R	MX7A414CASEHDL
MX7 Voice Application case with belt	R	MX7A404CASEVRNHDL
MX7 Padded handle with rubber overmold and two finger	R	MX7A406HANDLE
trigger, includes wrist strap		WA/A400HANDLE
Holster for MX7 with handle, belt not included		MX7A405HOLSTERHDL
Holster for MX7 without handle, belt not included	R	MX7A407HOLSTERNHDL
Holster for MX7 with handle and boot, belt not included	R	MX7A410HLSTRWHDLBOOT
<b>Holster</b> for MX7 without handle, with boot, belt not included		MX7A409HOLSTERWBOOT
Holster belt		9200L67
Black rubber protective <b>boot</b> , <i>do not use with Desktop Cradle</i> .		MX7A488PROTBOOT
Yellow rubber protective <b>boot</b> , <i>do not use with Desktop Cradle</i> .		MX7A489PROTBOOTYEL
Carry case for MX7 with Gearkeeper retractor		MX7A408RETRACTORCASE

Carry case for MX7 with handle. ( For use with Gearkeeper retractor – MX7A412RETRACTORWBLT ).	R	MX7A411RTRCORCASEHDL		
Gearkeeper retractor with belt. ( For use with Carry case for MX7 with handle – MX7A411RTRCORCASEHDL )	R	MX7A412RETRACTORWBLT		
MX7 With Haldide – MX7A411KTRCORCASEIDE)  MX7 Charge/Comm Interface Cable, USB Client for ActiveSync	R	MX7A052MULTICBLUSB		
MX7 Charge/Comm Interface Cable, RS-232 Serial ActiveSync, D9 Female	R	MX7A055MULTICBLDA9F		
AC/DC <b>power supply</b> with US power cord for use with MX7 Charge/Comm cables	R	9000A319PSACUS		
AC/DC <b>power supply</b> without power cord for use with MX7 Charge/Comm cables	R	9000A302PSACWW		
RS-232 Serial Adapter <b>cable</b> , 6in, for use with printers that provide their own source of power.	R	MX7A058ADPTCBLPER		
MX7 Headset coiled adapter <b>cable</b> , includes quick disconnect headset connector. A headset is still required.	R	MX7A060ADPTCBLVOICE		
MX7 Replacement <b>Stylus</b> , 10-pack	R	MX7A584STYLUS		
Large tethered <b>stylus</b> which fit the MX7 carry cases, 5 pack	R	9000A507STYLUS		
CD with CE 5.0 API's and LXE API's with documentation for custom application development	R	MX7A504CE50SDK		
Touch screen anti-glare anti-reflective protective <b>film</b> , 10 pack	R	MX7A584PROTFILM		
Voice Recognition and Headsets		THE PROPERTY OF THE PROPERTY O		
VoxBrowser <sup>TM</sup> English and Americas		VOXBROWSER ENG		
VoxBrowser <sup>TM</sup> Rest-of-the-World		VOXBROWSER ROW		
Single ear, single headband, <b>headset</b> with noise canceling microphone, includes 5 replacement windscreens	R	HX1A501SNGBHEADSET		
Single ear, dual headband, <b>headset</b> with noise canceling microphone, includes 5 replacement windscreens	R	HX1A502DUALBHEADSET		
Dual ear, behind the head, <b>headset</b> with noise canceling microphone, includes 5 replacement windscreens	R	HX1A503BTHHEADSET		
Replacement foam <b>block</b> for 502 dual band headsets, qty 1	R	HX1A504AHSBLOCKFOAM		
Replacement head <b>yoke</b> for dual band 502 headset, qty 1	R	HX1A505DUALYOKE		
Replacement head <b>yoke</b> for single band 501 headset, qty 1	R	HX1A506SINGLEYOKE		
Replacement windscreen for all headset microphones, 10 Pack	R	HX1A508WINDSCREEN10		
Replacement windscreen for all headset microphones, 50 Pack	R	HX1A509WINDSCREEN50		
Replacement foam <b>ear piece cover</b> for 501 and 502 headsets, 10 pack	R	HX1A510FOAMEAR10		
Replacement foam ear piece cover for 501 and 502 headsets, 50 pack	R	HX1A511FOAMEAR50		
*** Contact your LXE representative for Voice Recognition a	ınd E	leadset availability.		

# **Mobile Bluetooth Barcode Readers**

LXE Bluetooth Ring Scanner module with laser ring scanner, battery, two hand/wrist straps (large and small)	R	8651A100BTLASERKIT
LXE Bluetooth Ring Scanner module with 1D/2D imager ring scanner, battery, two hand/wrist straps (large and small)	R	8652A100BTIMAGERKIT
Li-Ion Spare Battery for LXE Bluetooth Ring Scanner Module	R	8650A376BTBOHBATTERY
LXE Bluetooth Ring Scanner 8-bay battery charger with US	ъ	0.60 A 277DTDOLLOLODIG
power cord	R	8650A377BTBOHCHGRUS
LXE Bluetooth Ring Scanner single-bay charger with US wall	D	8651A379SINGLECHGRUS
plug	R	8031A3/98INGLECHGRUS
PowerScan 7000BT Scanner RS-232 with pointer	R	8700A301SCNRBTSRI
PowerScan 7000BT Base Station, RS232, without universal	R	8700A501BASERS232
power supply.	1	
PowerScan 7000BT Base Station Power Supply, Std US, 120V	R	8700A502PSACUS
PowerScan 7000BT, RS232 Cable for Base Station, DB9S,	R	8700A001CBL8DA9F
Coil, 8'	- `	070011001602001101
PowerScan 7000BT Battery Charger with Power Supply, Four	R	8700A503CHGR4US
Station, US Std		
PowerScan 7000BT Battery Pack	R	8700A504BATT
Bluetooth Standard Range Fuzzy Logic laser	R	8810A326SCNRBTFZ
Bluetooth Auto Range LORAX laser	R	8820A327SCNRBTER
Spare battery	R	8800A376BATTERY
US AC Power Cord (use with 8800A301ACPS and 8800A379CHGRBASE)	R	8800A051POWERCORD
Single Slot Universal Battery Charger adapter cup for 8800 Battery	R	8800A377CHGRADPTRCUP
Single slot battery charger with International power supply	R	8800A378CHGR1SLOT
Universal Battery charger 4-Slot Base. Power Supply included,		0000 A 270 CHCDD A CF
no AC power cord.	R	8800A379CHGRBASE
LS3408 Scanner Holster for Belt	R	8200A501HOLSTRBELT
Mounted Take Up Reel (Mounted applications)	R	8000A501INDREEL
Auto Sense Intellistand, Hands Free Scanning	R	8500A505STANDSMT
CBL ASSY, DA9F, 9ft (cradle to terminal)	R	8500A051CBL9DA9F
Desk Cradle, Radio/Charging, Multi-Interface (requires data	R	8800A001CRADLERCMI
cable and power supply)		000011001CIG IDEDICINI
Desk Cradle, Charge Only, Multi-Interface (requires data cable	R	8800A002CRADLECMI
and power supply)		000011002CIG IDEDCIVII
Forklift Cradle, Radio/Charging, Multi-Interface (requires data	R	8800A003CRADLEVRCMI
cable and power supply)		
Forklift Cradle, Charge Only, Multi-Interface (requires data	R	8800A004CRADLEVCMI
cable and power supply)		
US AC Power Cord (use with 8800A301ACPS and	R	8800A051POWERCORD
8800A379CHGRBASE)		
Universal Desktop Power Supply 90-264VAC, 9VDC, 2A,	R	8800A301ACPS
EPS  O COVIDG Foodslift Dancer Scorples (For Hoo with Foodslift)		
9-60VDC Forklift Power Supply (For Use with Forklift	R	8800A302DCPS
Cradles)  Payor Cable: Connects DC Power Supply to Forklift Cradle	D	8800A052DCPWRCABLE
Power Cable: Connects DC Power Supply to Forklift Cradle Forklift Rugged Scanner Holder with RAM mount (all metal	R	0000AU32DCF WKCABLE
with cloth padding)	R	8800A005STAND
with cloth padding)	1	

# **MX7 Cradles**

Cradle <b>Power Supply</b> , AC/DC, US, with power cord	R	9000A321PSACUS
Cradle <b>Power Supply</b> , AC/DC, WW, without power cord	R	9000A322PSACWW
Cradle, Desktop with spare battery charging	R	MX7A388DESKCRADLEWW
MX7 <b>Passive vehicle cradle</b> . Does not support charging or communication. U-Bracket kit included.	R	MX7A007VMCRADLE
<b>RAM mount kit</b> for MX7 Passive Vehicle Bracket. This kit does NOT include the Cradle. Attaches to U-Bracket.	R	MX7A001RAMBRKT
MX7 Main <b>Battery</b> , Lithium Ion	R	MX7A380BATT
Black rubber protective <b>boot</b> , designed for Desktop Cradle use.	R	MX7A490PROTBOOTBLK
Yellow rubber protective <b>boot</b> , designed for Desktop Cradle use.	R	MX7A491PROTBOOTYEL
MX7 Charge/Comm Interface Cable, USB Client for ActiveSync	R	MX7A052MULTICBLUSB
MX7 Charge/Comm Interface Cable, RS-232 Serial ActiveSync, D9 Female	R	MX7A055MULTICBLDA9F
RS-232 Serial Adapter Cable, 6 in., for use with printers that provide their own source of power	R	MX7A058ADPTCBLPER
MX7 <b>Headset</b> coiled adapter cable, includes quick disconnect headset connector. A headset is still required.	R	MX7A060ADPTCBLVOICE
MX7 Base Plate Kit	R	MX7A586RPLCENDPLATE
Tethered Scanners (Cradle connection only)		
Scanner, Powerscan SR, 8' Cbl, WW	R	8300A326SCNRPWRSR8DA9F
Scanner, Powerscan SR, 12' Cbl, US	-	8300A327SCNRPWRSR12DA9F
Scanner, Powerscan LR, 8' Cbl, WW	R	8310A326SCNRPWRLR8DA9F
Scanner, Powerscan LR, 12' Cbl, US	R	8310A327SCNRPWRLR12DA9F
Scanner, Powerscan XLR, 8' Cbl, WW	R	8320A326SCNRPWRXLR8DA9F
Scanner, Powerscan XLR, 12' Cbl, US	-	8320A327SCNRPWRXLR12DA9F
Scanner, LS3408ER, 9' Cbl, US See Note	R	8520A326SCNRERDA9F
Scanner, LS3408FZ, Fuzzy Logic, 9' Cbl, US	R	8510A326SCNRFZYDA9F

# **The MX7 Hand Held Computer**

# **Reboot Sequence**

When the Windows CE desktop is displayed or an application begins, the power up (or reboot) sequence is complete. If you have previously saved your settings, they will be restored on reboot. Application changes are saved when OK is clicked on an application applet.

#### **Warm Reset**

Hold down the Power key for 15 seconds until the display blanks, then release the key. A warm reset does not affect the operating system and no data loss occurs. There may be slight delays while the wireless client connects to the network, re-authorization for voice-enabled applications completes, Wavelink Avalanche management of the MX7 startup completes, or Bluetooth relationships establish or re-establish.

#### **Cold Reset**

Important:-- Because of the extreme nature of the Cold Reset, LXE recommends that the Cold Reset be used only as an emergency procedure and the Warm Reset be used whenever necessary.

Tap **Run** and type COLDBOOT.EXE. Tap the OK button to coldboot the MX7. The default settings are restored when the device powers on again.

For OS versions prior to August 2008, calibrating the touchscreen will need to be performed when the cold boot process is complete.

If needed, change the MX7 Time and Date from it's factory default value by tapping the **Settings** | **Control Panel** | **Date/Time** icon.

## **Saving Changes to the Registry**

The MX7 saves the registry when you:

- Tap the **P** | **Run** | and type **Warmboot**.
- Perform a Suspend / Resume function (by pressing the Pwr key and then pressing it again).
- Install Restart in the Start menu by 🧨 | Run | CTL RESTART=1 and then tap 🥙 | Restart.

The registry save process takes 5 - 10 seconds.

The registry is automatically saved every 20 minutes. It is also saved every tenth time the registry settings are changed. Registry settings are changed when control panel applet (e.g. Date/Time) parameters are changed by the user and a warm boot was not performed afterward.

When you tap **Run** | and type **Coldboot**, factory default registry settings are loaded. All user changes and settings are lost.

Touchscreen Display

## **Touchscreen Display**



Figure 26 Touchscreen Display

The touchscreen display is an active color LCD unit capable of supporting VGA graphics modes. Display size is 240 x 320 pixels or ½ VGA in portrait orientation. The touchscreen allows signature capture and touch input. A pen stylus is included. The touchscreen responds to an actuation force (touch) of 4 oz. of pressure (or greater).

The color display is optimized for indoor lighting. The display is off when the mobile device is in Suspend mode and when the device is being powered by the backup battery only.

# **Applying the Protective Film to the Display**

First, clean the display of fingerprints, lint particles, dust and smudges.

Remove the protective film from it's container. Remove any protective backing from the film sheet by lifting the backing from a corner of the film. Discard the backing.

Apply the film to the screen starting at one side and smoothing it across the display. If air bubbles appear, raise the film slightly and continue smoothing the film across the display until it covers the glass surface of the display.

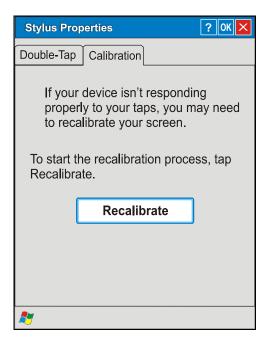
If dust, lint or smudges are trapped between the protective film and the glass display, remove the protective film, clean the display and apply the protective film again.

Touchscreen Display 37

### **Touchscreen Calibration**

If the touchscreen is not responding properly to stylus taps, the touchscreen may need to be recalibrated. Press <Ctrl>+<Esc> to force the Start Menu to appear, if needed. Contact your System Administrator for assistance.

To recalibrate the screen, select 🏲 | Settings | Control Panel | Stylus | Calibration.



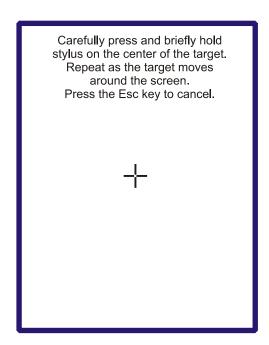


Figure 27 Touchscreen Recalibration

To start, tap Recalibrate. Follow the instructions on the screen and press the Enter key to save the new calibration settings or press <Esc> to cancel or quit.

See the MX7 Reference Guide for complete instructions.

## **Cleaning the Glass Display/Scan Aperture**

Note: These instructions are for components made of glass. If there is a removable protective film sheet on the display screen, remove the film sheet before cleaning the screen.

Keep fingers and rough or sharp objects away from the scan aperture and display. If the glass becomes soiled or smudged, clean only with a standard household cleaner such as Windex® without vinegar or use Isopropyl Alcohol. Do not use paper towels or harsh-chemical-based cleaning fluids since they may result in damage to the glass surface. Use a clean, damp, lint-free cloth. Do not scrub optical surfaces. If possible, clean only those areas which are soiled. Lint/particulates can be removed with clean, filtered canned air.

## **Adjusting the Display Backlight**

## **Set the Display Backlight Brightness**

When the backlight is on, press the **Blue** key and the **Scan** key.

- Use the Up Arrow and Down Arrow keys to adjust backlight brightness until the display lightens or darkens to your satisfaction.
- Press the Enter key to exit this mode.

At the minimum dimness level, the display is still viewable. The brightness setting is recalled upon a return from Suspend and also upon a warm reset.

## **Set the Display Backlight Timer**

Select | Settings | Control Panel | Display | Backlight tab. Change the parameter values and tap OK to save the changes.



Figure 28 Setting the Display Backlight Timer

The first option affects the mobile device when it is running on battery power only. The second option affects the device when it is running on external power (e.g. AC adapter).

The default value for the battery power timer is 3 seconds. The default value for the external power timer is 2 minutes. The backlight will remain on all the time when both checkboxes are blank.

The display backlight timer dims the backlight at the end of the specified time.

The keypad backlight can be synchronized with the display backlight activity. See 💆 | Settings | Control Panel | Keyboard | Backlight tab

## **Setting the Power Schemes Timers**

Note: Refer to the section titled **Power Modes** in the **MX7 Reference Guide** for information relating to the power states of the mobile device.

Select | Settings | Control Panel | Power | Schemes tab. Change the parameter values and tap OK to save the changes.

# **Battery Power Scheme**

Use this option when the device will be running on battery power only.

Switch state to User Idle:

Default is After 3 seconds

Switch state to System Idle:

Default is After 15 seconds

Switch state to Suspend:

Default is After 5 minutes

#### **AC Power Scheme**

Use this option when the device will be running on external power (e.g. AC adapter).

Switch state to User Idle:

Default is After 2 minute

Switch state to System Idle:

Default is After 2 minutes

Switch state to Suspend:

Default is After 5 minutes

These mode timers are cumulative. The System Idle timer begins the countdown after the User Idle timer has expired and the Suspend timer begins the countdown after the System Idle timer has expired. When the User Idle timer is set to "Never", the power scheme timers never place the device in User Idle, System Idle or Suspend modes (even when the device is idle).

Because of the cumulative effect, and using the Battery Power Scheme Defaults listed above:

- The backlight turns off after 3 seconds of no activity,
- The display turns off after 18 seconds of no activity (15sec + 3sec),
- And the device enters Suspend after 5 minutes and 18 seconds of no activity.

# **Setting The Audio Speaker Volume**

Note: An application may override the control of the speaker volume. Turning off sounds saves power and prolongs battery life.

The speaker is located on the front of the device above the MX7 logo. The audio volume can be adjusted to a comfortable level for the listener. The volume is increased or decreased one step each time the volume key sequence is pressed. The device has an internal speaker and a jack for an external headset. Operational "beeps" are emitted from the speaker.

# **Using the Keypad**

Note: Volume & Sounds (in Settings) must be enabled before the following key sequences will adjust the volume.

To adjust speaker volume:

- Tap the **Orange** key then the **Scan** key to enter Volume change mode.
- Use the **Up Arrow** and **Down Arrow** keys to adjust volume until the speaker volume is satisfactory.
- Press the **Enter** key to exit this mode.

OK

Preview:

Save As

Delete

4:17 PM 💯

# **Using the Touchscreen**

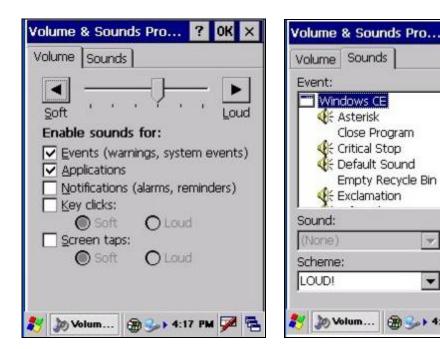


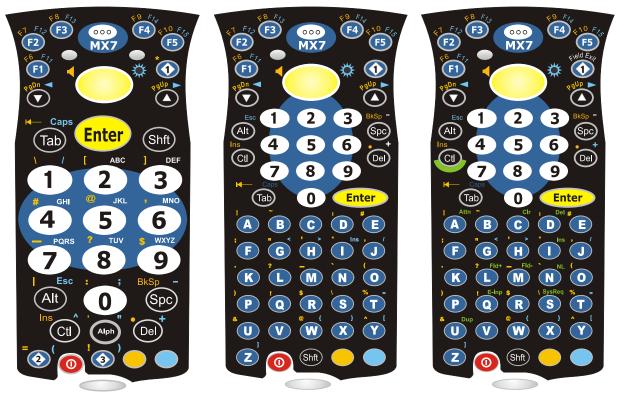
Figure 29 Volume & Sounds Properties

Tap | Settings | Control Panel | Volume & Sounds | Volume tab. Change the volume setting and tap OK to save the change. You can also select / deselect sounds for key clicks and screen taps and whether each is loud or soft.

As the volume scrollbar is moved between Loud and Soft, the computer will emit a tone each time the volume increases or decreases in decibel range.

## The Keypads

The keypad is installed and configured by LXE to your specifications.



32-key Keypad

55-key ANSI/CE Keypad

55-key IBM 5250 Keypad

Figure 30 The 32-key and 55-key Keypads

See Appendix A - Key Maps for instruction on the specific keypresses to access all keypad functions.

*Note:* Refer to the <u>MX7 Reference Guide</u> when re-mapping the keypad keys.

# **Keypad Backlight**

The keypad LED backlight can be turned off to conserve battery power. The default value is Always off. The backlight does not activate during Suspend/Resume or hardware reset.

Contact your System Administrator for assistance. Select Follow Display to synchronize the keypad backlight with the Display backlight timer settings. See **Start | Settings | Control Panel | Display icon | Backlight tab**.

## **LED Indicators**

# **System Status**

The System Status LED is located at the top left of the keypad, above the Scan button.

When the LED is	The Status is	Comment
		Replace the main battery with a fully charged main battery.
Blinking Red	Power Fail	Or
		Connect the MX7 to external AC power (to allow the internal charger to charge the main battery).
Steady Red	Main Battery Low	Low Battery Warning. Replace the main battery with a fully charged main battery.
Blinking Green	Display Off	No user intervention required.
No Color	Good	No user intervention required.

#### **Scan Status**

The Scan Status LED is located below the MX7 keypad.

When the Scan Status LED is	The Status is
Steady Green	Good Scan
Steady Red	Scan in Progress
Amber	Scanner/imager programming changes are being saved.
No Color	Scanner/Imager ready for use.

## Alpha Mode (32-key Alph Key)

The Alpha Mode LED is located below the <F4> key on the 32-key keypad.

LED functions outlined in previous sections titled *System Status* and *Scan Status* are the same for the 32-key mobile device.

When the Alph LED is	The Status is
Steady Green	Device is in "Alpha" character input mode.
No Color	Device is in "Numeric" key input mode.

## **Standard Keys**

Scan	The integrated scanner/imager scans only when the Scan button is pressed (or when the scan trigger is pressed on the optional trigger handle).
Enter	The Enter key is used to confirm a forms entry or to transmit information. How it is used is determined by the application running on the mobile device.
Diamond	The Diamond key(s) can be programmed to duplicate a single keypress (as defined by Windows CE) with the exception of the Shift, Alt and Ctrl/Ctl key.
Numeric	The number keys are used to add numbers to data entry fields.
Alpha	The alpha keys are used to add letters and characters to data entry fields.
Space	The Spc key adds a space to the line of data on the display. This function is similar to a regular keyboard's Spacebar. Note that the Spc key only stays active for one keystroke.

# **Function Keys**

### **Sticky Keys**

The Sticky Key feature allows the user to activate multi-keypress combinations with one finger. A sticky key function is similar to the Caps Lock key function on a desktop computer keyboard.

#### Ctl / Ctrl (Control key)

A Control sticky keypress stays active until the Control key is pressed again. The Control key enables the control functions of the keypad. This function is similar to a regular keyboard's Control key. Each time you need to use a Control function, you need to press the Ctl / Ctrl key before pressing the desired key.

#### Alt (Alternate key)

An Alt sticky keypress stays active until the Alt key is pressed again. The Alt key enables the alternate functions of the keypad. This function is similar to a regular keyboard's Alt key. Each time you need to use an alternate function, you need to press the Alt key before pressing the desired key.

#### Shft (Shift key)

A Shift keypress ends a sticky key function. The Shft key enables the shifted functions of the keypad. This function is similar to a regular keyboard's Shift key. Note that the Shift key only stays active for one keystroke. Each time you need to use a Shifted function, you need to press the Shft key before pressing the desired key.

When the Shft key is pressed the next key is determined by the major key legends, i.e., the alpha keys display lower case letters -- when CAPS is On alpha characters are capitalized. For example, when CAPS is On and the Shft key and the G key are pressed, a lower case g is displayed.

#### **Orange and Blue Keys**

The Orange and Blue keys are sticky keys that, when tapped, activate the second functions of the keypad. Printed above many keys are small characters, in either orange (on the left side of the key) or blue (on the right side of the key), that represent the second function of that key. Using the sticky key activates the second key function.

Note that the blue and orange sticky keys only stay active for one keystroke. Each time you need to activate a second function you must press the Orange or Blue key. To cancel a sticky key function before pressing another key, press the same sticky key again.

#### **Orange Key**

Tap the Orange key to enter "orange" mode. Tap it again to cancel "orange" mode.

If you were in "blue" mode before you pressed the Orange key, blue mode is cancelled and you enter Orange mode.

#### **Blue Key**

Tap the Blue key to enter "blue" mode. Tap it again to cancel "blue" mode.

If you were in "orange" mode before you pressed the Blue key, orange mode is cancelled and you enter Blue mode.

#### **Field Exit**



The Diamond 1 key can be programmed as a Field Exit key. The Field Exit key is used to exit an input field. If the field is an Auto Enter field, the auto transmit function is activated. Refer to the *Mappable Diamond Keys* section for instruction.



*IBM 5250 specific keypad only.* A Control sticky keypress stays active until the Control key is pressed again. The Control key enables the control functions of the keypad. This function is similar to a regular keyboard's Control key. Each time you need to use a Control function, you need to press the Ctl key before pressing the desired key.

Note the green highlight on the Control key and the 5250 commands highlighted in green on the 5250 keypad overlay.

### **Mode Key Functions**

#### CapsLock Mode

This function is similar to a regular keyboard's CapsLock key. Note that the CapsLock mode stays active until the CapsLock key sequence is pressed again. Each time you need to use a Caps function, you need to press the Caps key sequence first. To cancel a CapsLock function press the Caps key sequence again.

The CapsLock key sequence is Blue key then the <Tab> key.

#### 55-Key Keypad

- No CapsLock AND No Shift keypress result is a lowercase letter.
- CapsLock OR Shift result is an uppercase letter.
- CapsLock AND Shift keypress result is a lowercase letter.

Visual Cue: A Capital A is displayed in the taskbar when the device is in CapsLock mode or the Caps Key has been pressed and the next key (to be capitalized) has not been pressed.

#### 32-Key Keypad

#### Example: 2 B or Not 2 B

To put the number 2 in a text entry field: Tap the <2> key once.

To put a lowercase "b" in a text field: Tap the <Alph> key, then tap the <2> key twice.

To put an uppercase "B" in a text field: Tap the <Alph> key, tap the <Shft> key or the <CapsLock> key, then tap the <2> key twice.

To enter a string of letters in a text field, tap the <Alph> key to toggle it On. It remains active until it is tapped again and toggled off.

To enter a string of numbers in a text field, make sure the <Alph> key is toggled off.

#### **Taskbar Icons**

As MX7 devices and applications open and change state, icons are placed in the Taskbar. In most cases, tapping the icon in the Taskbar opens the related application.

Refer to **P** | **Help** for an explanation of standard Windows CE taskbar icons.

Following are **a few** of the MX7 and LXE unique taskbar icons that may appear in the Taskbar. These icons are in addition to the Windows CE taskbar icons.

*	Wireless Client Connected / Not Connected
*	Bluetooth
3	ActiveSync Connection
1:42 PM	Current Time
4	Summit Client signal strength.
<b>⊕</b>	LXEConnect session
100	Battery power remaining

Batteries 47

#### **Batteries**

Note: New batteries must be charged prior to use. If the main battery and backup battery are depleted, the mobile device reverts to factory default values. Wireless configuration parameters will need to be re-entered after reverting to factory default values. The backup battery is continually recharged by the main battery pack.

The mobile device is designed to work with a 2200 mAh Lithium-Ion (Li-ion) battery from LXE. Under normal conditions it should last approximately eight to ten hours before requiring a recharge. During very heavy scanning or RF transmitter use, the operating time of the battery may be less. The operating system keeps date and time valid for a minimum of four days using a fully charged backup battery and a main battery pack installed that has reached the Low Warning point.

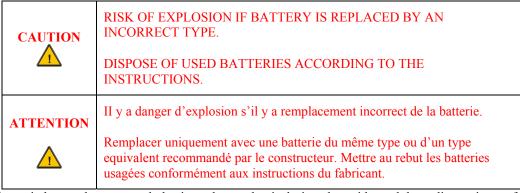
#### Battery Pack Model Number - 159904-0001 / MX7A380BATT



Figure 31 Lithium Ion Battery Pack

- 1. Contacts, Battery Charging
- 2. Retaining Clip
- 3 Tab

## **Main Battery**



The main battery has a rugged plastic enclosure that is designed to withstand the ordinary rigors of an industrial environment. Exercise care when transporting the main battery making sure it does not come in contact with excessive heat or any power source other than an MX7 MultiCharger or the mobile device.

A new main battery pack can be fully charged in 6 hours when it is in an MX7 connected to AC power and 3.5 hours when it is in the MX7 multicharger.

48 Batteries

## **Backup Battery**

The internal 50mAh Nickel Cadmium (NiCd) backup battery provides power to the device for a short amount of time when the main battery has been depleted, removed or has failed. The backup battery status and conditioning is available using | Settings | Control Panel | Battery. The backup battery is charged by the main battery pack only. If the backup battery is completely discharged, it may take up to 5 hours to recharge.

Backup battery replacement is performed by LXE.

Note:

An uninterrupted external power source (wall AC adapters) transfers power to the computer's internal charging circuitry which, in turn, recharges the main battery and backup battery. Frequent connection to an external power source, if feasible, is recommended to maintain backup battery charge status as the backup battery cannot be recharged by a dead or missing main battery.

## **Battery Hotswapping**

Important: When the backup battery power is Low or Very Low ( | Settings | Control Panel | Power | Battery tab) connect the AC adapter to the MX7 *before* replacing the main battery pack.

Replace the main battery pack after first pressing the Power key and placing the MX7 in Suspend Mode. LXE recommends any work in progress be saved prior to replacing the main battery pack.

Simply replace the discharged main battery with a fully-charged main battery. A fully charged backup battery will retain data during a main battery hotswap for 5 minutes.

Warning: Never replace the main battery in a hazardous location.

# **MX7 Battery Multi-Charger**

The MX7 Multi-Charger is not approved for use in a Hazardous Location.

See Also: Section titled MX7 Cold Storage later in this guide.

# **Charge a Main Battery Pack**

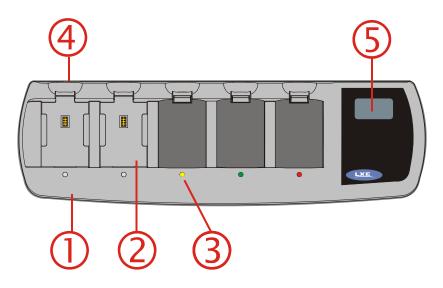
The main battery pack can be charged while it is in the MX7 (connected to an AC power supply) or while it is in the LXE MX7 Multi-Charger.

Please refer to the MX7 Multi-Charger User's Guide for instruction.

The multi-charger requires an external power source before battery pack charging/analyzing can commence.

The external Power Supply for the Multi-charger is shipped with the multi-charger.

MX7 Multi-Chargers are not approved for use in Hazardous Locations.



1 Front

- 4 Power Connection
- 2 Battery Charging Pocket
- 5 LCD Display
- 3 LED Indicators

Figure 32 MX7 Multi-Charger / Analyzer

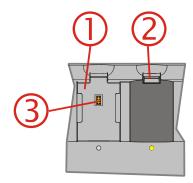


Figure 33 Insert Battery Pack in Charging Pocket

- 1. Battery Well
- 2. Retaining Clip
- 3. Battery Charging Contacts

Lower the battery pack straight into the battery charger pocket and push it down firmly. Do not "slam" the battery into the charging cup or drop it into the cup.

Failure to follow these instructions can result in damage to the main battery or the charger.



Please refer to the MX7 Multi-charger User's Guide for technical information and operating instructions.

MX7 Cradles (Optional)

## **MX7 Cradles (Optional)**

MX7 docking cradles restrain the MX7, re-charge batteries, and enable serial, audio or USB communication with a PC, scanner, printer or other peripheral device. MX7 keypad data entries can be mixed with cradle-tethered scanner barcode data entries while the MX7 is in a powered cradle. Bluetooth device connection and use, while the MX7 is docked, are managed by the MX7 Control Panel Bluetooth program, not the cradle. The cradles are designed to secure an MX7 with or without a protective boot (MX7A490PROTBOOTBLK or MX7A491PROTBOOTYEL), a handstrap and/or a trigger handle.

Using a wall AC adapter, the desktop cradle can also recharge a spare MX7 battery in approximately 4 hours. The MX7 battery recharging is managed by the docked MX7 power management configuration. The MX7 can be either On or in Suspend Mode while in the cradles. Special purpose and power cables are available from LXE.

Wireless host/client communications can occur whether the cradle is receiving external power or not as wireless functions draw power from the main battery in the MX7.

The MX7 Passive Vehicle Cradle does not have connectors that can accept an external power source or tethered scanner. It is designed to secure the MX7, without or without a protective boot, handstrap or trigger handle, in a vehicle.

Important: Use the power cable provided with the cradle power supply adapter *only* with the desktop cradle. The adapter is incompatible with other MX7 power cables.

### **Suggestions / Notes**

- Remove cables from the I/O port of the MX7 before docking it in a cradle.
- Review the *Base Plate Replacement* section in the *MX7 Cradle Reference Guide* and install a new base plate on the MX7 if necessary.
- Allow clearance above the cradles for inserting an MX7 with a trigger handle.
- Allow clearance behind the cradles for power cable connection ease. Allow clearance in front of the cradles for serial and I/O cable connection ease.
- Route desktop cradle cables to ensure they are protected from jostling, tugging or being disconnected by objects moving nearby.
- Install the pocket insert in the cradle charging well for use with an MX7 without a boot enclosure.
- Remove the pocket insert for use with an MX7 with a boot (MX7A490PROTBOOTBLK or MX7A491PROTBOOTYEL) enclosure.
- Use care when inserting the spare battery into the charging bay. Do not slam the battery into the bay, as this action could damage the contacts at the base of the charging bay.
- Keep dirt and foreign objects out of the cradles. Do not short circuit any of the desktop cradle charging terminals (pins), as this action could result in injury or property damage.
- Refer to the *MX7 Reference Guide* for information and instruction when using Bluetooth scanning or printing devices with an MX7 docked in a powered or non-powered cradle.



Please refer to the *MX7 Cradle Reference* Guide for installation, technical specifications and user instruction.

52 MX7 Cold Storage

### **MX7 Cold Storage**

#### **Highlights**

- MX7 Cold Storage (MX7CS) battery has a blue label.
- Snowflake decal above the MX7CS keypad.
- Heating element visible on the MX7CS touchscreen and the scanner aperture.
- MX7CS cold storage battery is recharged in the MX7 Multi-charger, MX7 Desk Cradle and when in an MX7 attached to an external power source (e.g. AC adapter).

The MX7 Cold Storage is designed to operate normally when reading barcodes and moving from, and into, cold storage warehouses, freezers and vehicles where the temperatures may vary between -30°C and 5°C (-22°F and 41°F).

# **Cold Storage Battery**

#### MX7 Cold Storage Battery Label Standard MX7 Battery Label

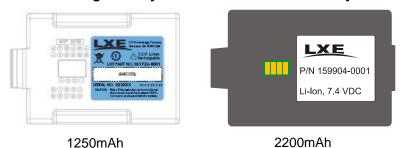


Figure 34 MX7 Cold Storage Battery

There is no change in the way the Cold Storage battery is inserted into and removed from the MX7CS battery well. See section in *Quick Start* titled *Inserting Fully Charged Battery* for instruction.

MX7CS Battery Life – minimum 2.5 hours while the unit is roaming, powered on with ambient temperature -10°C (14°F) or above, Display backlight turned on, Keypad LED backlight on, radio connected to Access Point, and scanner decoding barcodes.

The LXE Li-Ion main battery (MX7A381BATT) has been designed specifically for the MX7 Cold Storage device. This battery has a blue label while the standard MX7 battery has a white (MX7A380BATT) label.

# **Snowflake Decal**

An MX7 Cold Storage device has a snowflake decal between the touchscreen and the keypad. It is located to the left when the mobile device screen is facing forward.



Due to the heating elements overlaying the scan aperture, scanning may require the user to move the MX7CS scan aperture closer to the barcode for good scan results.

MX7 Cold Storage 53

### **Heating Elements**

Heating elements activate when ambient temperature drops below 0°C (32°F). LXE recommends using the stylus when performing screen touch functions.

There may be some condensation as the MX7CS moves in and out of cold storage areas. The condensation on the touchscreen and the scan aperture quickly dissipates.

The touchscreen heating elements and scanner aperture heating elements may be visible when the MX7 is tilted slightly. No user interaction is required to turn the heating elements on/off. Stylus taps on the touchscreen function normally.

# **Recharging Batteries**

The Cold Storage battery pack can be recharged to full capacity while in an MX7CS connected to an external power source and also while the Cold Storage battery pack is inserted in the charging bay in a powered MX7 desk cradle. The battery pack temperature must be above 10°C (50°F) before re-charging can begin.

Battery packs in the MX7 Multi-charger begin charging when the battery pack temperature is between 10°C (50°F) and +40°C (100°F).

To charge the Cold Storage battery pack to full capacity, the MX7 Multi-charger firmware must be at V1.07 or greater. The firmware version is noted on the multi-charger label on the bottom of the device.

If your multi-charger firmware needs to be upgraded, please contact your LXE representative.

The multi-charger and AC adapter are not designed to operate in a freezer or cold storage environment. Please refer to the MX7 Multi-charger User's Guide for instruction and technical information.

#### Hot-swapping the Cold Storage Battery

The MX7CS, and a charged 2.5V Supercap backup battery, retains data during a main battery hot-swap at -30°C (-22°F) for at least 90 seconds. The temperature of the fully charged replacement Cold Storage main battery must be +10°C (14°F), or above.

#### **Normal Operation Temperature Ranges**

- In the freezer where the temperature ranges between -30°C to -18°C (-22°F to 0°F).
- In the loading dock where temperature ranges between 0°C to 5°C (32°F to 41°F)with the relative humidity at 65%
- Moving between the freezer and a loading/unloading area where the temperature transitions from -30°C to 5°C (-22°F to 41°F)

MX7 Cold Storage

# **Appendix A Key Maps**

#### Introduction

#### Remember:

"Sticky" keys are also known as "second" function keys.

Ctl/Ctrl, Alt, Shft, Blue and Orange keys are "sticky keys". Sticky keys do not need to be held down before pressing the next (or desired) key. It is valid to use combined modifiers on specific keys.

Note: The key mapping in this appendix relates to the physical keypad. See section titled <u>Input Panel</u> for the Virtual (or Soft) Keypad used with the stylus. See Also: <u>Keypad Control Panel</u> in the <u>MX7 Reference</u> Guide.

## 55-Key Alphanumeric Keymaps

### **ANSI / CE Keypad**

When using a sequence of keys that includes a sticky key, press the sticky key first, release it, then press the rest of the key sequence.

When using a sequence of keys that includes the Orange or Blue keys, press the color key first then the rest of the key sequence.

Alphabetic keys default to lower case letters. Press the Shft key, then the alphabetic key for an uppercase letter.

When the computer boots, the default condition of Caps (or CapsLock) is Off. The Caps (or CapsLock) condition can be toggled with Blue plus Tab key sequence.

To Get This MX7 Key /		Press Th					
Function	Blue	Orange	Ctl	Alt	Shft	Caps Lock	Press This Key
Power / Suspend							Power <sup>1</sup>
Field Exit (default VK_PAUSE)  MAP=Mappable	MAP	MAP			MAP		Diamond#1
Volume Adjust Mode		Х					Scan Key <sup>2</sup> or
	X						V

<sup>&</sup>lt;sup>1</sup> Tapping the Power key when in any sticky mode (Blue, Orange, Shift, etc) either turns the device On (when Off) or places it in Suspend (when active).

<sup>&</sup>lt;sup>2</sup> Orange+Scan (and Blue+V) enters Volume Adjust Mode. Use Up Arrow and Down Arrow to adjust volume. Press any other key but Up Arrow or Down Arrow to exit Adjust Mode.

To Get This MX7 Key /							
Function	Blue	Orange	Ctl	Alt	Shft	Caps Lock	Press This Ke
Display Backlight Brightness Adjust Mode	x						Scan Key <sup>3</sup>
Toggle Blue Mode							Blue
Toggle Orange Mode							Orange
Toggle Shift Mode							Shft
Alt							Alt
Control							Ctl
Scan							Scan Key
Esc	X						Alt
Space							Spc
Enter							Enter
CapsLock (Toggle)	Х						Tab
Back Space		Х					Spc
Tab							Tab
BackTab		X					Tab
Up Arrow							Up Arrow
Down Arrow							Down Arrow
Right Arrow	X						Up Arrow
Left Arrow	X						Down Arrow
	X						I (letter i)
Insert							or
		X					Ctl
Delete							Del
Home					х		Down Arrow
End					х		Up Arrow
Page Up		Х					Up Arrow
Page Down		Х					Down Arrow
F1							F1
F2							F2
F3							F3
F4							F4
F5							F5
F6		X					F1
F7		X					F2
F8		X					F3
F9		X					F4
F10		X					F5

<sup>&</sup>lt;sup>3</sup> Blue+Scan enters Backlight Brightness Adjust Mode. Use the Up Arrow and Down Arrow to adjust brightness. Press any other key but Up Arrow or Down Arrow to exit Adjust Mode.

To Get This MX7 Key / Press These Keys and Then							
Function	Blue	Orange	Ctl	Alt	Shft	Caps Lock	Press This Key
F11	X						F1
F12	X						F2
F13	X						F3
F14	X						F4
F15	X						F5
F16					х		F1
F17					Х		F2
F18					х		F3
F19					х		F4
F20					х		F5
F21 <sup>4</sup>		X			Х		F1
F22		X			Х		F2
F23		X			х		F3
F24		X			Х		F4
а							А
b							В
С							С
d							D
е							E
f							F
g							G
h							Н
i							1
j							J
k							K
1							L
m							M
n							N
0							0
р							Р
q							Q
r							R
S							S
t							Ŧ
u							U
V							V
W							W

 $<sup>^4\,\,</sup>$  The keypress sequence for F21 through F24 is Shift+Orange+F1 through F4.

To Cot This MV7 Vov. /	7 Key / Press These Keys and Then							
To Get This MX7 Key / Function	Blue	Orange	CtI	Alt	Shft	Caps Lock	Press This Key	
у							Υ	
Z							Z	
A					Х		Α	
В					Х		В	
С					Х		С	
D					Х		D	
Е					Х		E	
F					Х		F	
G					Х		G	
Н					Х		Н	
1					Х		I	
J					х		J	
K					Х		K	
L					Х		L	
М					Х		M	
N					Х		N	
0					Х		0	
Р					Х		Р	
Q					Х		Q	
R					Х		R	
S					Х		S	
Т					Х		Т	
U					Х		U	
V					Х		V	
W					Х		W	
Х					Х		Х	
Y					Х		Υ	
Z					Х		Z	
1							1	
2							2	
3							3	
4							4	
5							5	
6							6	
7							7	
8							8	
9							9	
0							0	

To Get This MX7 Key / Function							
	Blue	Press The Orange	CtI	Alt	Shft	Caps Lock	Press This Key
. period		X					DEL
or							or
. (period)		X					K
<	X						G
[	X						Υ
]	X						Z
>	X						Н
=	X						Т
{	X						W
}	X						Х
/	X						J
-	х						Spc
+	х						Del
		Х					I (letter i)
* (asterisk)							or
					x		8
: (colon)		Х					D
; (semicolon)		Х					F
. (period)		Х					K
?		X					L
` (accent)		X					N
_ (underscore)		X					М
, (comma)		X					J
' (apostrophe)		X					Н
~ (tilde)		X					В
\		X					S
		Х					А
ű		X					G
		X					Q
!							or
					х		1
		X					W
@							or
					х		2
		Х					E
#							or
					х		3
		X					R
\$							or
					х		4

To Get This MX7 Key / Function		Press Th	ese Ke	ys and	Then		
	Blue	Orange	Ctl	Alt	Shft	Caps Lock	Press This Key
		Х					Т
%							or
					х		5
		X					Υ
^							or
					х		6
		X					U
&							or
					x		7
		Х					0
(							or
					x		9
		X					Р
)							or
					х		0 (zero)

# 5250 Key Map for the 55-Key Keypad

Legend	Explanation	Key Sequence
Attn	Attention	Ctl + A
Clr	Clear	Ctl + C
Del	Delete	Ctl + D
Dup	Duplicate	Ctl + U
E-Inp	Erase Input	Ctl + Q
Field Exit	Enter	Diamond 1
Fld	Field Minus	Ctl + M
Fld +	Field Plus	Ctl + L
Ins	Insert	Ctl + I
NL	New Line	Ctl + N
SysReq	System	Ctl + S

Please refer to the RFTerm Reference Guide for further information about 5250 key functions on the mobile device.

## 32-Key Numeric-Alpha Keypad

When using a sequence of keys that require an alpha key, first press the Alph key. Use the Shft sticky key or the Caps key sequence (Blue+Tab) for upper case alphabetic characters.

Pressing the Alph key forces "Alpha" mode for the 2,3,4,5,6,7,8, and 9 keys. The 1 and 0 keys continue to place a 1 and 0 into the text field.

To create a combination of numbers and letters before pressing Enter, remember to tap the Alph key to toggle between Alpha and Numeric mode.

When using a sequence of keys that do not include the Alph key but does include a sticky key, press the sticky key first then the rest of the key sequence.

To Get This MX7 Key /		Press Th	Press This Key				
Function	Blue	Orange	Ctl	Alt	Shft	Alpha	Fiess IIIIs Ney
Power / Suspend							Power <sup>5</sup>
Field Exit (default	MAP				MAP		Diamond#1
VK_PAUSE)	IVIAP				IVIAP		MAP=Mappable
=		X					Diamond#2
or					MAP		Default is MAP
(	X						MAP=Mappable
!		X					Diamond#3
or					MAP		Default is MAP
)	X						MAP=Mappable
Volume Adjust Mode		X					Scan Key <sup>6</sup>
Display Backlight Brightness Adjust Mode	x						Scan Key 7
Toggle Blue Mode							Blue
Toggle Orange Mode							Orange
Toggle Shift Mode							Shft
Toggle Alpha Mode							<u>Alph</u>
Alt Mode							Alt
Control Mode							Ctrl
Scan Mode							Scan Key
Esc	X						Alt
Space							Spc
Enter							Enter
CapsLock (Toggle)	X						Tab
Back Space		X					Spc
Tab							Tab

<sup>&</sup>lt;sup>5</sup> Tapping the Power key when in any sticky mode (Blue, Orange, Shift, etc) either turns the device On (when Off) or places it in Suspend (when active).

<sup>&</sup>lt;sup>6</sup> Orange+Scan enters Volume Adjust Mode. Use Up Arrow and Down Arrow to adjust volume. Press any other key but Up Arrow or Down Arrow to exit Adjust Mode.

<sup>&</sup>lt;sup>7</sup> Blue+Scan enters Backlight Brightness Adjust Mode. Use the Up Arrow and Down Arrow to adjust brightness. Press any other key but Up Arrow or Down Arrow to exit Adjust Mode.

To Get This MX7 Key / Function		Press Th	Dunca This W				
	Blue	Orange	Ctl	Alt	Shft	Alpha	Press This Key
BackTab		Х					Tab
Up Arrow							Up Arrow
Down Arrow							Down Arrow
Right Arrow	X						Up Arrow
Left Arrow	X						Down Arrow
Insert		X					Ctrl
Delete							Del
Home					Х		Down Arrow
End					Х		Up Arrow
Page Up		X					Up Arrow
Page Down		X					Down Arrow
F1							F1
F2							F2
F3							F3
F4							F4
F5							F5
F6		X					F1
F7		Х					F2
F8		Х					F3
F9		X					F4
F10		Х					F5
F11	X						F1
F12	X						F2
F13	X						F3
F14	X						F4
F15	X						F5
F16					Х		F1
F17					Х		F2
F18					Х		F3
F19					Х		F4
F20					Х		F5
F21		X			Х		F1
F22		X			Х		F2
F23		X			Х		F3
F24		X			Х		F4
a						х	2
b						x	22
C						x	222
d						X	3
<u>-</u>					1	,	

To Get This MX7 Key /		Press Th					
Function	Blue	Orange	Ctl	Alt	Shft	Alpha	Press This Key
f						х	333
g						Х	4
h						х	44
i						Х	444
j						Х	5
k						х	55
I						Х	555
m						х	6
n						х	66
0						Х	666
р						Х	7
q						Х	77
r						х	777
S						х	7777
t						Х	8
u						Х	88
V						Х	888
W						Х	9
Х						Х	99
у						Х	999
Z						Х	9999
А					Х	х	2
В					Х	х	22
С					Х	х	222
D					Х	х	3
E					Х	х	33
F					Х	х	333
G					Х	х	4
Н					Х	Х	44
I					Х	х	444
J					Х	Х	5
K					Х	Х	55
L					Х	Х	555
М					Х	Х	6
N					Х	х	66
0					Х	х	666
Р					Х	х	7
Q					х	х	77
R					Х	х	777
S					Х	Х	7777

To Get This MX7 Key / Function		Press Th					
	Blue	Orange	Ctl	Alt	Shft	Alpha	Press This Key
T					Х	х	8
U					Х	х	88
V					Х	х	888
W					Х	х	9
Х					Х	х	99
Υ					Х	х	999
Z					Х	х	9999
1							1
2							2
3							3
4							4
5							5
6							6
7							7
8							8
9							9
0							0
. (period)		Х					DEL
<	х						7
		Х					2
[							or
	x						2
		Х					3
]							or
	X						3
>	X						8
=		X					Diamond#2
{	X						4
}	X						5
1	X						1
-	X						Spc
+	X						Del
					Х		8
* (asterisk)							or
		X					Diamond#1
: (colon)		X					0
; (semicolon)	X						0
. (period)		X					Del
?		X					8
` (accent)	X						6
_ (underscore)		X					7

To Get This MX7 Key / Function		Press Th	Press This Key				
	Blue	Orange	Ctl	Alt	Shft	Alpha	Fiess IIIIs Ney
, (comma)		X					6
' (apostrophe)		X					Alph
~ (tilde)	X						9
\		X					1
		X					Alt
íí.	X						Alph
		X					Diamond#3
!							or
					x		1
					х		2
@							or
		X					5
					х		3
#							or
		X					4
		X					9
\$							or
					x		4
%					х		5
					х		6
٨							or
	X						Ctrl
&					Х		7
(	X						Diamond#2
							or
					х		9
	X						Diamond#3
)							or
					х		0 (zero)

# **Appendix B Regulatory Notices and Safety Information**

#### **FCC Information:**

This device complies with FCC Rules, part 15. Operation is subject to the following two conditions:

- This device may not cause harmful interference, and
- 2. This device must accept any interference received, including interference that may cause undesired operation.

**Note**: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction guide, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

**Warning**: Changes or modifications to this device not expressly approved by LXE, Inc., could void the user's authority to operate this equipment.

#### **EMC Directive Requirements**:

This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

#### **Industry Canada:**

This Class A digital apparatus meets all requirements of the Canadian Interference Causing Equipment Regulations. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Cet appareil numérique de la classe A respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

Le présent appareil numérique n'émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques de Classe A prescrites dans le Règlement sur le brouillage radioélectrique édits par le ministère des Communications du Canada.

#### **Notice:**

The long term characteristics or the possible physiological effects of radio frequency electromagnetic fields have not been investigated by UL.

#### **Li-Ion Battery**

When disposing of the MX7 main battery, the following precautions should be observed: The battery should be disposed of promptly. The battery should not be disassembled or crushed. The battery should not be heated above 212°F (100°C) or incinerated.



**Important**: This symbol is placed on the product to remind users to dispose of Waste Electrical and Electronic Equipment (WEEE) appropriately, per Directive 2002-96-EC. In most areas, this product can be recycled, reclaimed and re-used when properly discarded. Do not discard labeled units with trash. For information about proper disposal, contact LXE through your local sales representative, or visit www lxe com.

#### **RF Safety Notice (Odyssey Client)**

Caution



This device is intended to transmit RF (Radio-Frequency) energy. In order to comply with FCC and Industry Canada radio-frequency exposure requirements for body-worn operations, this device should be used with the Nylon Holster with Belt-Loop accessory (P/N: 159890-0001) in accordance with the user instructions. This device may also be operated with body-worn holster and carry-case accessories that do not contain metallic components and maintain a minimum separation distance of 1.5 cm between the back side of the device (battery compartment side) and the user's body. This device must not contain co-located transmitters. Use of this device in a manner not consistent with these instructions can increase the risk of radio-frequency exposure.

#### This device contains transmitter Module FCC ID: KDZLXE4830P

#### RF Safety Notice (Summit 802.11 b/g Client - 4830)

Caution



This portable device with its antenna complies with FCC's and Industry Canada's RF exposure limits set for an uncontrolled environment. This equipment has shown compliance with FCC and Industry Canada Specific Absorption Rate (SAR) limits. Highest reported SAR for the MX7 is .758W/kg on body. Any accessories not provided by LXE should not be used with this device. This device must not be co-located or operating in conjunction with any other antenna or transmitter.

#### This device contains transmitter Module FCC ID: KDZLXE4831P

#### RF Safety Notice (Summit 802.11 a/b/g Client - 4831)

Caution



This portable device with its antenna complies with FCC's and Industry Canada's RF exposure limits set for an uncontrolled environment. This equipment has shown compliance with FCC and Industry Canada Specific Absorption Rate (SAR) limits. Highest reported SAR for the MX7 is .225W/kg on body. Any accessories not provided by LXE should not be used with this device. This device must not be co-located or operating in conjunction with any other antenna or transmitter.

#### R&TTE Directive Requirements (Applies only to equipment operated within the EU/EFTA)



Information to User

A label on the exterior of the device should resemble one of the labels shown below (the label contains the LXE part number of the installed radio card). The labels shown below and affixed to the device, identify where the device may be used and where its use is restricted. Use of a device is prohibited in countries not listed below or otherwise identified by the label. (May or may not include the 0560 Notifed Body No. Substitute 4 digit Notified Body No. may also be applied.)





Complies with IDA Standards DA103458

Republic of Singapore - LXE Dealer License Number DA103458 complies with IDA Standards.

## MX7 Approvals/Standards

Product	EMI / EMC Standards	Safety Standards
MX7	FCC Part 15 Subpart B, Class A EN 55022	UL 60950 / CSA C22.2 No. 60950 IEC/EN 60950-1
	Class A (CISPR 22) EN 55024:1998 AS/NZS 3548, Class A (CISPR 22)	CDRH: 21 CFR 1040.10 IEC/EN 60825-1

### **Transceiver:**

Transceiver	RF standards	RF Safety Standards
MX7 with 802.11 b/g [Summit Client - 4830]	FCC Part 15 EN 300 328	FCC O.E.T. Bulletin 65
	IC-RSS 210	Industry Canada RSS 102
MX7 with 802.11 a/b/g [Summit Client - 4831]	FCC Part 15 EN 300 328	FCC O.E.T. Bulletin 65
	EN301 893	Industry Canada RSS 102
	IC-RSS 210	
MX7 with 802.11 b/g	FCC Part 15.247, Subpart C	FCC O.E.T. Bulletin 65
[Odyssey Client]	ECC Bulletin OET 65 EN 300 328	Industry Canada RSS 102
	IC-RSS 210	

### LXE 802.11b/g WLAN Declaration of Conformity [Odyssey]

#### LXE

#### **DECLARATION OF CONFORMITY**

according to:

the R&TTE Directive; 99/5/EEC
The EMC Directive; 89/336/EEC
The Low Voltage Directive; 73/23/EEC
and the Marking Directive; 93/68/EEC

Type of Equipment: DSSS 2.4GHz WLAN

Brand Name or Trademark: LXE

Type Designation: MX7 with 802.11b/g WLAN

Manufacturer: LXE Inc.

Address: 125 Technology Parkway Norcross, GA 30092 USA

\_\_\_\_\_\_

The following harmonized European Norms have been applied:

**EMC Standards:** 

EN 301 489-1: 07-2000 Electromagnetic compatibility and Radio spectrum Matters (ERM); ElectroMagnetic

Compatibility (EMC) standard for radio equipment and services; Part 1: Common

technical requirements

EN 301 489-17:07-2000 Electromagnetic compatibility and Radio spectrum Matters (ERM); ElectroMagnetic

Compatibility (EMC) standard for radio equipment and services; Part 17: Specific conditions for Wideband data and HIPERLAN equipment

EN 55022: 1998 Limits and methods of measurement of radio disturbance characteristics of

information technology equipment

Radio Standards:

EN 300 328-1 and -2: 2000-7 Radio Equipment and Systems (RES);

Wideband transmission systems;

Technical characteristics and test conditions for data transmission equipment operating in the 2.4 GHz ISM band and using spread spectrum modulation

echniques

Safety Standard:

EN60950-1: 2001 Safety of information technology equipment, including electrical business equipment

The product carries the CE Mark:

(€ ①

We, LXE Inc., declare that the equipment specified above complies with all Essential Health and Safety Requirements of the above Directives and Standards, as amended.

Cyril A. Binnom Jr. EMC Approvals Engineer

Date of issue: November 8, 2005

LXE Inc. 125 Technology Parkway Norcross, GA 30092-2993 USA ph. 770/447-4224 fax 770/447-6928



# A/C Power Supply Safety Statement – MX7 Output Rated 12 VDC, 1.25 A.



The LXE-approved AC Power Adapter is only intended for use in a 25°C (77°F) maximum ambient temperature environment.



#### **Optional A/C Power Supply:**

Outside North America, this unit is intended for use with an IEC certified ITE power supply with output rated as stated at the top of this page. (US)

#### Alimentation c.a. optionnelle:

Hors de l'Amérique du Nord, cette unité est conçue pour être utilisée avec une alimentation ITE certifiée CEI de sortie nominale indiquée au haut de cette page. (FR)

#### Valgfrit vekselstrømforsvgning

Udenfor Nord Amerika er denne enhed udstattet med en IEC (international elektronisk Kommission) udfærdiget med en ITE strømforsygning med strømudgang som fastslået på denne sides begyndelse. (DK)

#### Vaihtoehtoinen vaihtovirran svöttölaite:

Pohjois-Amerikan ulkopuolella tämä laite on tarkoitettu käytettäväksi sellaisen IEC:n sertifioiman ITE-tehonsyöttölaitteen kanssa, jonka antoteho on tämän sivun yläosassa esitetyn mukainen. (FI)

#### **Optionales Netzteil (Wechselstrom)**

Außerhalb Nordamerikas sollte diese Einheit über ein der IEC-Norm entsprechendes ITE-Netzteil gespeist werden, und zwar mit einer wie oben auf dieser Seite genannten Ausspeisung. (DE)

#### Προαιρετική Τροφοδοσία Συνεχούς Ρεύματος

Εκτός Β. Αμερικής, η μονάδα αυτή προορίζεται για χρήση με ένα τροφοδοτικό ΙΤΕ πιστοποιημένο κατά ΙΕC με ονομαστική ισχύ όπως δηλώνεται στην αρχή της σελίδας. (GR)

#### Alimentazione opzionale a corrente alternata:

Al di fuori dei paesi dell'America del nord, l'unità deve essere impiegata con un dispositivo d'alimentazione per attrezzature informatiche approvato dalla IEC la cui potenza nominale sia pari a quella indicata all'inizio della pagina. (IT)

#### Vekselstrømforsyning (ekstrautstyr):

Utenfor Nord-Amerika skal dette produktet brukes med en IEC-sertifisert ITE-strømforsyning med klassifisert effekt som angitt øverst på denne siden. (NO)

#### Fornecimento opcional de CA:

Fora dos EUA, esta unidade destina-se a ser usada com dispositivos de fornecimento de corrente ITE com certificação IEC, com a capacidade indicada no topo desta página. (PT)

#### Suministro optativo de corriente alterna

Fuera de América del Norte, esta unidad se debe utilizar con un alimentador ITE homologado por la IEC (comisión electrotécnica internacional) con una salida que tenga la calificación que figura en la parte superior de esta página. (ES)

#### Valfri A/C Strömförsörining

Utanför Nordamerika är det meningen att denna enheten används med en IEC-certifierad ITE-strömförsörjare med den uteffekt som anges längst uppe på den här sidan. (SE)

#### İsteğe Bağlı A/C Güç Kaynağı:

Kuzey Amerika dışında, bu ünite, çıkış sınıflandırması bu sayfanın başında belirtilen IEC sertifikalı bir ITE güç kaynağı ile birlikte kullanılmak üzere tasarlanmıştır. (TR)

Updated 10/01/2001

Legend: Danish – DK; English – US; Finnish – FI; French – FR; German – DE; Greek – GR; Italian – IT; Norwegian – NO; Portuguese – PT; Spanish – ES; Swedish – SE; Turkish – TR.



# **Laser Light Safety Statement**



#### Warning:

This product uses laser light. One of the following labels is provided on the scanner. Please read the Caution statement. (US)

#### Mise én garde:

Ce produit utilise un rayon laser. L'une des étiquettes suivantes est apposée sur le scanneur. Veuillez lire l'avertissement qu'elle contient. (FR)

#### Advertência:

Este produto usa luz de laser. O scanner contém um dos seguintes avisos. Favor ler o Aviso. (PT)

#### Varning:

Denna produkt använder laserljus. En av de nedanstående etiketterna sitter på scannern. Var god läs varningstexten. (SE)

#### **Advarsel:**

Dette produkt anvender laserlys. En af følgende mærkater anvendes på scanneren. Læs venligst sikkerhedsforanstaltningen. (DK)

#### Varoitus:

Tämä tuote käyttää laservaloa. Skannerissa on jokin seuraavista tarroista. Lue Huomio-kohta. (FI)

#### Warnung:

Dieses Produkt verwendet Laserlicht. Eines der folgenden Etiketten befindet sich auf dem Scanner. Bitte lesen Sie den Gefahrenhinweis. (DE)

#### **Attenzione:**

Questo prodotto utilizza luce laser. Una delle etichette seguenti c' ubicata sullo scanner. Si raccomanda di leggere con attenzione le avvertenze riportate. (IT)

#### Advarsel:

Dette utstyret bruker laserlys. En av følgende etiketter er plassert på scanneren. Les advarselen på etiketten. (NO)

#### Advertencia:

Este producto usa luz de láser. Las etiquetas se proveen en la máquina exploradora. Por favor, lea detenidamente la explicación para las precauciones. (ES)

#### Waarschuwing:

Dit product gebruikt laserlicht. Een van de volgende labels is op de scanner aangebracht. Lees a.u.b. de waarschuwing onder Oppassen. (NL)

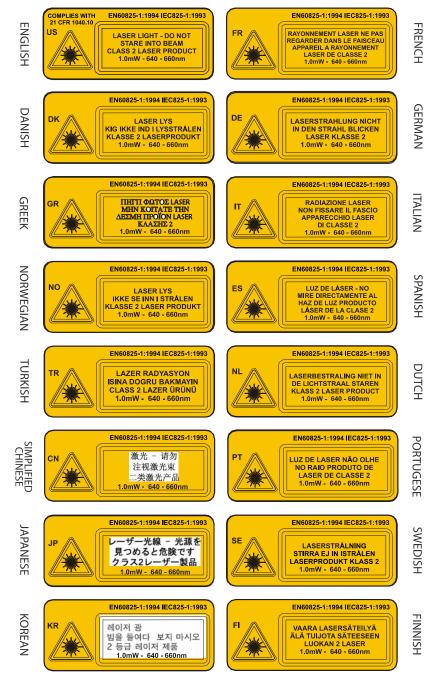


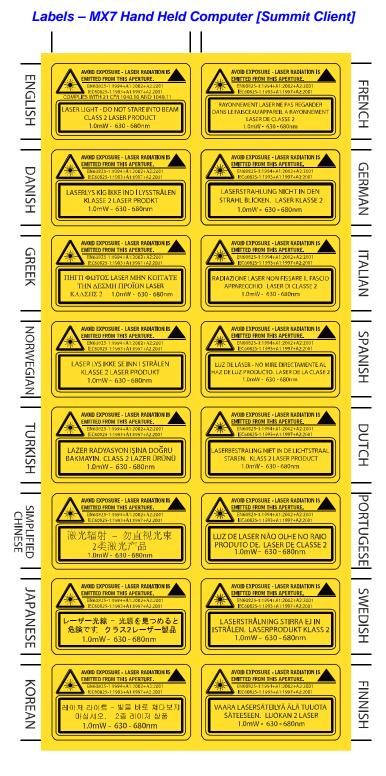
# **Laser Light Safety Statement**



Uyarý:	Προειδοποίηση:	
Bu ürün lazer ýþýðý kullanýr.	Αυτό το προϊόν χρησιμοποιεί λέιζερ φως.	
Aþaðýdaki etiketlerden bir tanesi tarayýcýnýn üstünde saðlanýr.	Υπάρχει μία από τις ακόλουθες ετικέτες στο σαρωτή.	
Lütfen Dikkat ifadesini okuyun. (TR)	Παρακαλούμε διαβάστε τη δήλωση με τίτλο Προσοχή. (GR)	
경고:	<u> </u>	
본 제품은 레이저 광선을 사용합니다.	この製品はレーザー光線を使用します。	
다음 라벨 중 하나가 스캐너에 제공됩니다.	次のラベルのうち1つがスキャナーに 貼られています。	
주의 사항을 읽어 주십시오. (KR)	注意事項をお読みください。(JP)	
警告:	Legend:	
本产品使用激光。	Chinese-CN; Danish-DK; Dutch-NL; English-US; Finnish-FI; French-FR; German-DE; Greek-GR; Italian-IT; Japanese-JP; Korean-KR; Norwegian-NO; Portuguese-PT; Spanish-ES; Swedish-SE; Turkish-TR	
下列一个标签将随扫描仪一道提供。		
请阅读"当心"一栏的内容。(CN)		

#### Labels - MX7 Hand Held Computer [Odyssey Client]





#### **Revision History**

#### Revision H, May 2008

- Introduction Added Continuous Scan Mode.
- Quick Start Accessories -- Added Cold Storage battery. Added Back of Hand Bluetooth Ring Scanner.
- MX7 Hand Held Computer Added *MX7 Cold Storage*. Added *Mobile Bluetooth Accessories* after *Bluetooth Devices* section that contains brief pairing instruction.

#### Revision G, October 2007

• Accessories: Added Mobile Bluetooth barcode readers.

#### Revision F, May 2007

- Entire Manual: Added Bluetooth information and instruction. Added Keypad backlight information and instruction. Added reference to MX7 Cradle Reference Guide.
- Quick Start : Updated Accessories.
- MX7 Hand Held Computer: Removed *Passive Vehicle Cradle*. Added section titled *MX7 Cradles*.

#### Revision E, Feb 2007

- Notices: Updated MX7 specific trademark statements.
- Quick Start : Added 2D Imager instruction.
- Appendix B: Added 4830 (Summit) Declaration of Conformity.

#### Revision D, Sep 2006

- Notices: Added Wavelink Avalanche trademark statement.
- Quick Start: Expanded instruction for external power supply to emphasize that 3 prong outlet must be plugged into wall outlet before power cable is connected to the MX7.
- Appendix B Regulatory Notices and Safety Information: Added "Revision History" section.

#### Revision C, Aug 2006

- Introduction: Added Laser Label for Summit Client. Laser Label for Odyssey Client does not change.
- Quick Start: Added section titled "MX7 Features". Added figure titled "MX7 Desktop." Added Multi AppLock activation key instruction "Entering the Multi AppLock Activation Key". "Installing Trigger Handle": Added: "Equipment Needed: Torque wrench capable of torquing to 3±1 in/lb (.34± .11 N/m)". Removed "and washers" from step 5 and included torque instruction in step 6. Expanded instruction when using audio cable and headsets "Connecting the Audio Cable and a Headset". Added note about SE 824 scanner and it's SE 955 replacement effective July 2006. Added note to LXE Login Utility: "Should only be used with Odyssey Clients". Accessories: Added ROHS indicators. Added Voice accessories. Removed MX7A309PSACWW. Added 9000A302PSACWW AC/DC power supply, int'l, no power cord.
- Appendix B Regulatory Notices and Safety Information : Added Summit Radio to Approvals section.
   Added Laser Labels for Summit Client Mobile Device. Laser labels for Odyssey Client do not change.
- Entire Manual: Removed all reference to Bluetooth except to state that Bluetooth is not supported by LXE.

#### Revision B, May 2006

 Notices and Appendix B – Regulatory Notices and Safety Information: Added label and text: "Republic of Singapore – LXE Dealer License Number DA103458 complies with IDA Standards."

#### Revision A, Initial Release, Dec 2005

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